U. I. C. C.
NOV 16 1976
LIBRARY

Analytical Abstracts

Index to Volume 30 1976

Published by
The Chemical Society

PUBLICATIONS BOARD

Chairman

C. Kemball, M.A., Sc.D., C.Chem., F.R.I.C., M.R.I.A., F.R.S.E., F.R.S.

J. W. Barrett, C.B.E., Ph.D., C.Chem., F.R.I.C., C.Eng., F.I.Chem.E.

F. J. Bryant, B.Sc., Ph.D., A.R.C.S., D.I.C.

J. Chatt, M.A., Sc.D., C.Chem., F.R.I.C., F.R.S.

H. J. Cluley, M.Sc., Ph.D., C.Chem., F.R.I.C.

L. Crombie, Ph.D., D.Sc., C.Chem., F.R.I.C., F.R.S.

C. F. Cullis, M.A., D.Sc., D.Phil., C.Chem., F.R.I.C.

P. Gray, M.A., Ph.D., Sc.D., C.Chem., F.R.I.C.

R. B. Moyes, B.Sc., Ph.D., C.Chem., F.R.I.C.

R. O. C. Norman, D.Sc., M.A., D.Phil., C.Chem., F.R.I.C.

W. G. Overend, Ph.D., D.Sc., C.Chem., F.R.I.C.

C. W. Rees, Ph.D., D.Sc., C.Chem., F.R.I.C., F.R.S.

E. C. Rhodes, B.Sc., Ph.D., C.Chem., F.R.I.C., F.I.M.

T. M. Sugden, C.B.E., M.A., Ph.D., D.Sc., C.Chem., F.R.I.C., F.R.S.

F. C. Tompkins, B.Sc., Ph.D., D.Sc., A.R.C.S., C.Chem., F.R.I.C., F.R.S.

G. Wilkinson, Ph.D., Hon.D.Sc.(Edin.), F.R.S.

T. I. Williams, B.Sc., M.A., D.Phil., C.Chem., F.R.I.C.

Director of Publications

L. C. Cross, T.D., Ph.D., A.R.C.S., C.Chem., F.R.I.C.

ANALYTICAL ABSTRACTS COMMITTEE

Chairman

F. J. Bryant, B.Sc., Ph.D., A.R.C.S., D.I.C.

D. C. Abbott, B.Sc., Ph.D., C.Chem., F.R.I.C.

J. Chatt, M.A., Sc.D., C.Chem., F.R.I.C., F.R.S.

Mrs H. I. Fisk, B.Sc.

I. D. Fleming, B.Sc., Ph.D., C.Chem., M.R.I.C.

J. H. Hunt, B.Sc., Ph.D.

H. M. N. H. Irving, M.A., D.Phil., D.Sc., C.Chem., F.R.I.C., L.R.A.M.

W. C. Johnson, M.B.E., C.Chem., F.R.I.C.

S. J. Lyle, B.Sc., Ph.D.

J. E. Page, Ph.D., D.Sc., C.Chem., F.R.I.C.

D. I. Rees, M.Sc., Ph.D.

J. F. Stevens, M.Phil., F.I.M.L.S., F.I.Biol., F.R.S.H.

J. S. Wragg, B.Sc., C.Chem., F.R.I.C.

Managing Editor: Analytical Abstracts

F. D. Grimmer

Editors: Analytical Abstracts

B. Harris

Mrs R. L. Jordan, B.Sc., M.Sc., C.Chem., M.R.I.C.

Analytical Abstracts is published by The Chemical Society, Burlington House, London W1V 0BN.

Subscriptions (non-members): The Chemical Society, Publications Sales Office, Blackhorse Road, Letchworth, Herts. SG6 1HN.

AABSAR 30 S1–S129 A1–A43 (1976)
ISSN: 0003–2689

Analytical Abstracts

Published by
The Chemical Society

Volume 30 1976

© The Chemical Society, 1976
Printed by Heffers Printers Limited Cambridge England

JOURNALS

Abbreviations of the names of journals as used in the abstracts are given in the following list of main sour that are regularly scanned. Journals that yield only an occasional item of analytical interest are omit from the list, as are Russian journals containing papers of which the translated titles have been publish through the medium of *Referativnyi Zhurnal*.

The abbreviations, in italics, after the full names of the journals refer to the languages in which t journals are published.

Acta chem. scand.	Acta Chemica Scandinavica [*Eng.*]
Acta chim. hung.	Acta Chimica Academiae Scientiarum Hungaricae [*Eng., Ge*
Acta pharm. hung.	Acta Pharmaceutica Hungarica [*Hung.*]
Acta pharm. jugosl.	Acta Pharmaceutica Jugoslavica [*Serbo-Croat*]
Acta pharm. suec.	Acta Pharmaceutica Suecica [*Eng.*]
Acta Pol. pharm.	Acta Poloniae Pharmaceutica [*Pol.*]
Agric. biol. Chem.	Agricultural and Biological Chemistry [Tokyo] [*Eng.*]
AMDEL Bull.	Bulletin of the Australian Mineral Development Laborator [*Eng.*]
Am. ind. Hyg. Ass. J.	American Industrial Hygiene Association Journal [*Eng.*]
Analusis	Analusis (*formerly* Chimie Analytique *and* Methodes Physiqu d'Analyse) [*Fr.*]
Analyst, Lond.	Analyst [*Eng.*]
Analyt. Biochem.	Analytical Biochemistry [*Eng.*]
Analyt. Chem.	Analytical Chemistry [*Eng.*]
Analytica chim. Acta	Analytica Chimica Acta [*Eng., Fr., Ger.*]
Analyt. Lett.	Analytical Letters [*Eng., Fr., Ger.*]
An. Bromat.	Anales de Bromatologia [*Span.*]
Angew. Chem., int. Edn	Angewandte Chemie, International Edition [*Eng.*]
Angew. makromolek. Chem.	Angewandte makromolekulare Chemie [*Eng., Ger.*]
Annali Ist. sup. Sanita	Annali dell'Istituto Superiore di Sanita [*Eng., Fr., Ital.*]
Annls Falsif. Expert. chim.	Annales des Falsifications et de l'Expertise Chimique [*Fr.*]
Annls pharm. fr.	Annales Pharmaceutiques Francaises [*Fr.*]
An. Quim.	Anales de Quimica de la Real Sociedad Espanola de Fisica Quimica [*Span.*]
Appl. Optics	Applied Optics [*Eng.*]
Appl. Spectrosc.	Applied Spectroscopy [*Eng.*]
Arch. EisenhuettWes.	Archiv fuer das Eisenhuettenwesen [*Ger.*]
Arch. Pharm., Weinheim	Archiv der Pharmazie (und Berichte der Deutschen pharm zeutischen Gesellschaft) [*Ger.*]
Armyan. khim. Zh.	Armyanskii Khimicheskii Zhurnal [*Russ.*]
Arzneimittel-Forsch.	Arzneimittel-Forschung [*Ger.*]
Atmos. Environ.	Atmospheric Environment [*Eng.*]
Atom. Absorp. Newsl.	Atomic Absorption Newsletter [*Eng.*]
Aust. J. Chem.	Australian Journal of Chemistry [*Eng.*]
Azerb. khim. Zh.	Azerbaidzhanskii Khimicheskii Zhurnal [*Russ.*]
Beitr. Tabakforsch.	Beitraege zur Tabakforschung [*Eng., Ger.*]
Biochem. J.	Biochemical Journal [*Eng.*]
Biochem. Med.	Biochemical Medicine [*Eng.*]
Biochim. biophys. Acta	Biochimica et Biophysica Acta [*Eng.*]
Biochimie	Biochimie (*formerly* Bulletin de la Societe de Chimie Biol ique) [*Eng., Fr.*]
Biomed. Mass Spectrom.	Biomedical Mass Spectrometry [*Eng.*]
Bios, France	Bios [*Fr.*]
Boll. Soc. ital. Biol. sper.	Bollettino della Societa Italiana di Biologia Sperimentale [*Ita*
Brauwissenschaft	Brauwissenschaft [*Ger.*]
Br. med. J.	British Medical Journal [*Eng.*]
Br. Steel Corp. open Rep.	British Steel Corporation Open Report [*Eng.*]
Bull. chem. Soc. Japan	Bulletin of the Chemical Society of Japan [*Eng.*]
Bull. environ. Contam. Toxic.	Bulletin of Environmental Contamination and Toxicolo [*Eng.*]
Bull. Narcot.	Bulletin on Narcotics [*Eng.*]
Bull. Soc. chim. Fr.	Bulletin de la Societe Chimique de France [*Fr.*]
Bunseki Kagaku [Japan Analyst]	Bunseki Kagaku [*Jap.*]
Can. J. Biochem.	Canadian Journal of Biochemistry [*Eng., Fr.*]
Can. J. Chem.	Canadian Journal of Chemistry [*Eng., Fr.*]
Can. J. pharm. Sci.	Canadian Journal of Pharmaceutical Science [*Eng.*]
Can. J. Spectrosc.	Canadian Journal of Spectroscopy [*Eng., Fr.*]
Cereal Chem.	Cereal Chemistry [*Eng.*]
Chem. Geol.	Chemical Geology [*Eng., Fr.*]
Chemia analit.	Chemia Analityczna [*Eng., Fr., Ger., Pol., Russ.*]
Chem. Scr.	Chemica Scripta [*Eng.*]
Chemicke Listy	Chemicke Listy [*Czech*]
Chemicke Zvesti	Chemicke Zvesti [*Eng., Fr., Ger., Russ.*]
Chemicky Prumysl	Chemicky Prumysl [*Czech*]
Chemiker Ztg	Chemiker Zeitung [*Ger.*]

emistry, Taipei	Chemistry, Taipei [*Chin.*]
em. pharm. Bull., Tokyo	Chemical & Pharmaceutical Bulletin [*Eng., Ger.*]
em. Tech., Lpz.	Chemische Technik [*Ger.*]
emy Br.	Chemistry in Britain [*Eng.*]
emy Ind.	Chemistry and Industry [*Eng.*]
imia	Chimia [*Eng., Fr., Ger.*]
romatographia	Chromatographia [*Eng., Fr., Ger.*]
romat. Rev.	Chromatographic Reviews [*Eng.*]
n. Chem.	Clinical Chemistry [*Eng.*]
nica chim. Acta	Clinica Chimica Acta [*Eng., Fr., Ger.*]
ln Czech. chem. Commun.	Collection of Czechoslovak Chemical Communications [*Eng., Fr., Ger., Russ.*]
r. Acad. bulg. Sci.	Comptes Rendus de l'Academie Bulgare des Sciences [*Eng., Fr., Ger.*]
C crit. Rev. analyt. Chem.	CRC Critical Reviews of Analytical Chemistry [*Eng.*]
r. hebd. Seanc. Acad. Sci., Paris	Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences [*Fr.*]
oat. chem. Acta	Croatica Chemica Acta [*Eng., Ger.*]
lka Farm.	Ceskoslovenska Farmacie [*Czech, Slovak*]
rr. Sci.	Current Science [*Eng.*]
emie-Technik	Chemie-Technik [*Ger.*]
kl. Akad. Nauk SSSR	Doklady Akademii Nauk SSSR [*Russ.*]
kl. Akad. Nauk tadzhik. SSR	Doklady Akademii Nauk Tadzhikskoi SSR [*Russ.*]
kl. Akad. Nauk uzbek. SSR	Doklady Akademii Nauk Uzbekskoi SSR [*Russ.*]
. ApothZtg.	Deutsche Apotheker-Zeitung [*Ger.*]
. LebensmittRdsch.	Deutsche Lebensmittel-Rundschau [*Ger.*]
zacilik Bult.	Eczacilik Bulteni [*Eng., Turk.*]
sei Kagaku [*J. hyg. Chem.*]	Eisei Kagaku [*Jap.*]
nviron. Lett.	Environmental Letters [*Eng.*]
nviron. Sci. Technol.	Environmental Science & Technology [*Eng.*]
rdoel Kohle Erdgas Petrochem. Brennst.-Chem.	Erdoel und Kohle, Erdgas, Petrochemie vereinigt mit Brennstoff-Chemie [*Ger.*]
xperientia	Experientia [*Eng., Ger.*]
rmaceuticky Obz.	Farmaceuticky Obzor [*Czech, Slovak*]
rmacja pol.	Farmacja Polska [*Pol.*]
rmaco, Ed. prat.	Farmaco, Edizione Pratica [*Eng., Fr., Ital.*]
aserforsch. TextTech.—Z. PolymForsch.	Faserforschung und Textiltechnik—Zeitschrift fuer Polymerforschung [*Ger.*]
tte Seifen AnstrMittel	Fette, Seifen, Anstrichmittel [*Ger.*]
nn. Chem. Lett.	Finnish Chemical Letters (*formerly* Acta Chemica Fennica, B) [*Eng.*]
leischwirtschaft	Fleischwirtschaft [*Ger.*]
rens. Sci.	Forensic Science [*Eng.*]
eochim. cosmochim. Acta	Geochimica et Cosmochimica Acta [*Eng.*]
-I-T Fachz. Lab.	Glas-Instrumenten-Technik. Fachzeitschrift fuer das Laboratorium [*Eng., Ger.*]
rdian	Gordian [*Ger.*]
elv. chim. Acta	Helvetica Chimica Acta [*Fr., Ger.*]
erba pol.	Herba Polonica [*Pol.*]
lth Phys.	Health Physics [*Eng.*]
oppe-Seyler's Z. physiol. Chem.	Hoppe-Seyler's Zeitschrift fuer physiologische Chemie [*Ger.*]
uaxue Tongbao [*Chemy Bull.*]	Huaxue Tongbao [*Chin.*]
utn. Listy	Hutnicke Listy [*Czech*]
ndian J. appl. Chem.	Indian Journal of Applied Chemistry [*Eng.*]
ndian J. Chem.	Indian Journal of Chemistry [*Eng.*]
ndian J. Pharm.	Indian Journal of Pharmacy [*Eng.*]
ndian J. Technol.	Indian Journal of Technology [*Eng.*]
nds aliment. agric.	Industries Alimentaires et Agricoles [*Fr.*]
ndustrie agr.	Industrie Agrarie [*Ital.*]
nt. J. appl. Radiat. Isotopes	International Journal of Applied Radiation and Isotopes [*Eng., Fr., Ger.*]
nt. Sug. J.	International Sugar Journal [*Eng.*]
sotopenpraxis	Isotopenpraxis [*Ger.*]
srael J. Chem.	Israel Journal of Chemistry [*Eng.*]
zv. Akad. Nauk beloruss. SSR, Ser. khim. Nauk	Izvestiya Akademii Nauk Belorusskoi SSR, Seriya Khimicheskikh Nauk [*Russ.*]
zv. Akad. Nauk kazakh. SSR, Ser. khim.	Izvestiya Akademii Nauk Kazakhskoi SSR, Seriya Khimicheskaya [*Russ.*]
zv. Akad. Nauk latv. SSR, Ser. khim.	Izvestiya Akademii Nauk Latviiskoi SSR, Seriya Khimicheskaya [*Russ.*]
zv. Akad. Nauk SSSR, Ser. khim.	Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya [*Russ.*]
zv. sib. Otdel. Akad. Nauk SSSR	Izvestiya Sibirskogo Otdeleniya Akademii Nauk SSSR [*Russ.*]
zv. tomsk. politekh. Inst.	Izvestiya Tomskogo Politekhnicheskogo Instituta imeni S. M. Kirova [*Russ.*]
zv. vyssh. ucheb. Zaved., Khim. khim. Tekhnol.	Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya [*Russ.*]
. agric. Fd Chem.	Journal of Agricultural and Food Chemistry [*Eng.*]

J. Air Pollut. Control Ass.	Journal of the Air Pollution Control Association [*Eng.*]
J. Am. Oil Chem. Soc.	Journal of the American Oil Chemists' Society [*Eng.*]
J. appl. Chem. Biotechnol.	Journal of Applied Chemistry and Biotechnology [*Eng.*]
J. appl. Polym. Sci.	Journal of Applied Polymer Science [*Eng.*]
J. Ass. off. analyt. Chem.	Journal of the Association of Official Analytical Chemi [*Eng.*]
J. Ass. publ. Analysts	Journal of the Association of Public Analysts [*Eng.*]
J. chem. Soc., Dalton Trans.	Journal of the Chemical Society, Dalton Transactions [*Eng*
J. chem. Soc., Faraday Trans. I	Journal of the Chemical Society, Faraday Transactions I [*En*
J. chem. Soc., Faraday Trans. II	Journal of the Chemical Society, Faraday Transactions [*Eng.*]
J. chem. Soc., Perkin Trans. I	Journal of the Chemical Society, Perkin Transactions I [*En*
J. chem. Soc., Perkin Trans. II	Journal of the Chemical Society, Perkin Transactions II [*En*
J. Chin. chem. Soc., Taipei	Journal of the Chinese Chemical Society [Taipei] [*Eng.*]
J. Chromat.	Journal of Chromatography [*Eng., Fr., Ger.*]
J. chromat. Sci.	Journal of Chromatographic Science [*Eng.*]
J. Dairy Sci.	Journal of Dairy Science [*Eng.*]
J. electroanalyt. Chem.	Journal of Electroanalytical Chemistry and Interfacial Elect chemistry [*Eng., Fr., Ger.*]
J. electrochem. Soc.	Journal of the Electrochemical Society [New York] [*Eng.*]
J. Fd Sci.	Journal of Food Science [*Eng.*]
J. forens. Sci. Soc.	Journal of the Forensic Science Society [*Eng.*]
J. Indian chem. Soc.	Journal of the Indian Chemical Society [*Eng.*]
J. inorg. nucl. Chem.	Journal of Inorganic & Nuclear Chemistry [*Eng.*]
J. Inst. Brew.	Journal of the Institute of Brewing [*Eng.*]
J. Lipid Res.	Journal of Lipid Research [*Eng.*]
J. Paint Technol.	Journal of Paint Technology [*Eng.*]
J. Pharm. Belg.	Journal de Pharmacie de Belgique [*Fr.*]
J. Pharm. Pharmac.	Journal of Pharmacy and Pharmacology [*Eng.*]
J. pharm. Sci.	Journal of Pharmaceutical Sciences [*Eng.*]
J. Phys. E, scient. Instrum.	Journal of Physics E, Scientific Instruments [*Eng., Fr., Ger*
J. radioanalyt. Chem.	Journal of Radioanalytical Chemistry [*Eng., Fr., Ger.*]
J. Res. natn. Bur. Stand.	Journal of Research of the National Bureau of Standar [*Eng.*]
J. Sci. Fd Agric.	Journal of the Science of Food and Agriculture [*Eng.*]
J. Steroid Biochem.	Journal of Steroid Biochemistry [*Eng.*]
J. Wat. Pollut. Control Fed.	Journal of the Water Pollution Control Federation [*Eng.*]
Kautschuk Gummi Kunststoffe	Kautschuk und Gummi, Kunststoffe [*Ger.*]
Klin. Wschr.	Klinische Wochenschrift [*Ger.*]
Kunststoffe	Kunststoffe [*Ger.*]
Lab. Pract.	Laboratory Practice [*Eng.*]
Landw. Forsch.	Landwirtschaftliche Forschung [*Ger.*]
Lipids	Lipids [*Eng.*]
Magy. Kem. Foly.	Magyar Kemiai Folyoirat [*Hung.*]
Magy. Kem. Lap.	Magyar Kemikusok Lapja [*Hung.*]
Medicine Sci. Law	Medicine, Science and the Law [*Eng.*]
Med. Lab. Technol.	Medical Laboratory Technology [*Eng.*]
Metallurgia Metal Form.	Metallurgia and Metal Forming [*Eng.*]
Microchem. J.	Microchemical Journal [*Eng.*]
Mikrochim. Acta	Mikrochimica Acta [*Eng., Fr., Ger.*]
Mitt. Geb. Lebensmittelunters. u. Hyg.	Mitteilungen aus dem Gebiete der Lebensmitteluntersuchu und Hygiene [*Fr., Ger.*]
Mschr. Brau.	Monatsschrift fuer Brauerei [*Ger.*]
Nahrung	Nahrung [*Eng., Ger., Russ.*]
Nature, Lond.	Nature [*Eng.*]
Naturwissenschaften	Naturwissenschaften [*Eng., Ger.*]
Nucl. Instrum. Meth.	Nuclear Instruments and Methods [*Eng.*]
Periodica polytech. chem. Engng	Periodica Polytechnica, Chemical Engineering [*Eng., Ger.*]
Pestic. Sci.	Pesticide Science [*Eng.*]
Pharm. Acta Helv.	Pharmaceutica Acta Helvetiae [*Eng., Fr., Ger.*]
Pharmazie	Pharmazie [*Eng., Ger.*]
Pharm. Weekbl.	Pharmaceutisch Weekblad [*Dutch, Eng., Ger.*]
Plaste Kautsch.	Plaste und Kautschuk [*Ger.*]
Pol. J. Pharmac. Pharm.	Polish Journal of Pharmacology and Pharmacy [*Eng.*]
Powder Technol.	Powder Technology [*Eng.*]
Proc. analyt. Div. chem. Soc.	Proceedings of the Analytical Division of the Chemical Soci [*Eng.*]
Prof. Pap. U.S. geol. Surv.	Professional Papers. United States Geological Survey [*En*
Prostaglandins	Prostaglandins [*Eng.*]
Pure appl. Chem.	Pure and Applied Chemistry [*Eng., Fr., Ger.*]
Pyrethrum Post	Pyrethrum Post [*Eng., Fr.*]
Quim. analit.	Quimica Analitica *(formerly* Informacion de Quimica Analiti Pura y Aplicada a la Industria) [*Span.*]
Radiochem. radioanalyt. Lett.	Radiochemical and Radioanalytical Letters [*Eng., Fr., Ger*
Rapp. CEA	Rapport. Commissariat a l'Energie Atomique [*Fr.*]
Rep. atom. Energy Commn U.S.	Report. Atomic Energy Commission, United States [*Eng.*
Rep. Invest. U.S. Bur. Mines	Report of Investigations. United States Bureau of Mines [*En*

. natn. Inst. Metall.	Report. National Institute for Metallurgy [*Eng.*]
. U.K. atom. Energy Auth.	Report. United Kingdom Atomic Energy Authority [*Eng.*]
. scient. Instrum.	Review of Scientific Instruments [*Eng.*]
uta Asoc. bioquim. argent.	Revista de la Asociacion Bioquimica Argentina [*Span.*]
uta Chim.	Revista de Chimie [*Rom.*]
ue roum. Chim.	Revue Roumaine de Chimie [*Eng., Fr., Ger., Russ.*]
. ital. Sostanze grasse	Rivista Italiana delle Sostanze Grasse [*Ital.*]
czn. Chem.	Roczniki Chemii [*Eng., Fr., Ger., Pol.*]
czn. panst. Zakl. Hig.	Roczniki Panstwowego Zakladu Higieny [*Pol.*]
nd. J. clin. Lab. Invest.	Scandinavian Journal of Clinical & Laboratory Investigation [*Eng.*]
ence, N.Y.	Science [*Eng.*]
entia pharm.	Scientia Pharmaceutica [*Ger.*]
on Purif. Meth.	Separation and Purification Methods [*Eng.*]
on Sci.	Separation Science [*Eng.*]
viet Radiochem.	Soviet Radiochemistry [*English translation of* Radiokhimiya]
ectrochim. Acta, A	Spectrochimica Acta, Part A [*Eng., Fr., Ger.*]
ectrosc. Lett.	Spectroscopy Letters [*Eng.*]
erke	Staerke [*Eng., Ger.*]
aub, Reinhalt. Luft	Staub, Reinhaltung der Luft [*Ger.*]
eroids	Steroids [*Eng.*]
udia Univ. Babes-Bolyai, Ser. Chem.	Studia Universitatis Babes-Bolyai, Series Chemia [*Eng. Rom.*]
alanta	Talanta [*Eng., Fr., Ger.*]
APPI	TAPPI [Journal of the Technical Association of the Pulp and and Paper Industry] [*Eng.*]
av. Soc. Pharm. Montpellier	Travaux de la Societe de Pharmacie de Montpellier [*Fr.*]
ib. CEBEDEAU	Tribune de CEBEDEAU [Centre Belge d'Etude et de Documentation des Eaux] [*Fr.*]
udy Khim. khim. Tekhnol. [Gor'kii]	Trudy po Khimii i Khimicheskoi Tekhnologii [*Russ.*]
udy mosk. khim.-tekhnol. Inst.	Trudy Moskovskogo Khimiko-Tekhnologicheskogo Instituta imeni D. I. Mendeleeva [*Russ.*]
chen. Zap. perm. gos. Univ.	Uchenye Zapiski Permskogo Gosudarstvennogo Universiteta imeni M. Gor'kogo [*Russ.*]
kr. khim. Zh.	Ukrains'kii Khimicheskii Zhurnal [*Russ.*]
zbek. khim. Zh.	Uzbekskii Khimicheskii Zhurnal [*Russ.*]
est. leningr. gos. Univ., Fiz., Khim.	Vestnik Leningradskogo Gosudarstvennogo Universiteta, Fizika, Khimiya [*Russ.*]
est. mosk. gos. Univ., Ser. Khim.	Vestnik Moskovskogo Gosudarstvennogo Universiteta, Seriya Khimiya [*Russ.*]
at. Res.	Water Research [*Eng.*]
at. Sewage Wks	Water & Sewage Works [*Eng.*]
-Ray Spectrom.	X-Ray Spectrometry [*Eng., Fr., Ger.*]
akugaku Zasshi [J. pharm. Soc. Japan]	Yakugaku Zasshi [*Jap.*]
. analyt. Chem.	Zeitschrift fuer analytische Chemie [*Eng., Ger.*]
. anorg. allg. Chem.	Zeitschrift fuer anorganische und allgemeine Chemie [*Ger.*]
av. Lab.	Zavodskaya Laboratoriya [*Russ.*]
. Chemie, Lpz.	Zeitschrift fuer Chemie [*Ger.*]
entbl. Pharm., Pharmakother. u. Lab.-diagnostik	Zentralblatt fuer Pharmazie, Pharmakotherapie und Laboratoriums-diagnostik [*Ger.*]
h. analit. Khim.	Zhurnal Analiticheskoi Khimii [*Russ.*]
h. prikl. Khim., Leningr.	Zhurnal Prikladnoi Khimii [*Russ.*]
h. prikl. Spektrosk.	Zhurnal Prikladnoi Spektroskopii [*Russ.*]
. klin. Chem. klin. Biochem.	Zeitschrift fuer klinische Chemie und klinische Biochemie [*Eng., Ger.*]
. Lebensmittelunters. u. -Forsch.	Zeitschrift fuer Lebensmittel-Untersuchung und -Forschung [*Eng., Ger.*]

ACKNOWLEDGEMENTS

The organisations publishing the following journals, or their own abstracts, are thanked for allowi reproduction of some abstracts.

Abstract Bulletin of the Institute of Paper Chemistry
Chemical Abstracts
Euro Abstracts
Flour Milling and Baking Research Association Abstracts
Food RA Abstracts
Fuel Abstracts and Current Titles
International Sugar Journal
Journal of the Institute of Brewing
Lead Abstracts
Mineralogical Abstracts
Nuclear Science Abstracts
Nutrition Abstracts and Reviews
RAPRA Abstracts
World Surface Coatings Abstracts
World Textile Abstracts
Zinc Abstracts

ABBREVIATIONS AND SYMBOLS

Certain abbreviations in everyday use are not included in the following list. When any doubt might ari from the use of an abbreviation or symbol the word is printed in full.

adenosine 5′-monophosphate	AMP
adenosine 5′-pyrophosphate	ADP
adenosine 5′-triphosphate	ATP
alternating current	a.c.
approximate, -ly	approx.
aqueous	aq.
atomic-absorption spectrophotometr-y, -ic	a.a.s.
atomic-emission spectrometr-y, -ic	a.e.s.
atomic-fluorescence spectrometr-y, -ic	a.f.s.
atomic number	Z
attenuated total reflectance	a.t.r.
biochemical oxygen demand	BOD
boiling-point	b.p.
chemical oxygen demand	COD
coefficient	coeff.
concentrated	conc.
concentration	concn.
crystalline, crystallised	cryst.
current density	c.d.
density, relative	d
deoxyribonucleic acid	DNA
diameter, inside	i.d.
diameter, outside	o.d.
differential thermal analysis	d.t.a.
dilute (as adjective)	dil.
5-dimethylaminonaphthalene-1-sulphonyl	dansyl
direct current	d.c.
dissociation constant	K
electron spin (or paramagnetic) resonance	e.s.r.
ethylenediaminetetra-acetate	edta
gas chromatograph-y, -ic	g.c.
gas - liquid chromatograph-y, -ic	g.l.c.
gas - solid chromatograph-y, -ic	g.s.c.
half-wave potential	$E_{\frac{1}{2}}$
height equivalent to a theoretical plate	h.e.t.p.
high-performance liquid chromatography	h.p.l.c.
infra-red	i.r.
insoluble	insol.
ionic strength	I
mass spectrometr-y, -ic	m.s.
maxim-um, -a	max.
molar extinction coefficient	ϵ
molecular weight	mol. wt.
neutron-activation analysis	n.a.a.
nicotinamide–adenine dinucleotide (oxidised form)	NAD^+
nicotinamide–adenine dinucleotide (reduced form)	NADH
normal calomel electrode	n.c.e.
normal hydrogen electrode	n.h.e.
nuclear magnetic resonance	n.m.r.
optical rotation	α
optical rotatory dispersion	o.r.d.
partial pressure (as in, *e.g.*, pCO_2)	p
poly(tetrafluoroethylene)	PTFE
potential difference	p.d.
precipitate (as a noun)	ppt.
precipitated	pptd.
precipitation	pptn.
preparation	prep.
recrystallised	recryst.
refractive index	n_λ^t
relative band speed	R_F
relative humidity	r.h.
ribonucleic acid	RNA
saturated (as adjective)	satd.
saturated calomel electrode	s.c.e.
soluble	sol.
solution	soln.
specific rotation	$[\alpha]_\lambda^t$
standard temp. and pressure	s.t.p.
thin-layer chromatograph-y, -ic	t.l.c.
ultra-violet	u.v.
volume	vol.
wavelength	λ
weight	wt.

UNITS OF MEASUREMENT

well as those listed below, other symbols given in the Systeme International d'Unites (SI) y be used where appropriate. The symbols 'mμ' (for nm) and 'γ' (for μg) are not used.

pere	A	molar (concentration)	M
ström	Å	neutrons per square centimetre per second	n cm^{-2} s^{-1}
osphere	atm	newton	N
mic mass unit	a.m.u.	normal (concentration)	N
nts per minute	c.p.m.	ohm	Ω
ie	Ci	parts per million	p.p.m.
ntegrations per minute	d.p.m.	pascal	Pa
tron-volt	eV	per cent. (vol. in vol.)	%(v/v)
ivalent	equiv.	per cent. (wt. in vol.)	%(w/v)
ad	F	per cent. (wt. in wt.)	%(w/w)
ss	G	pounds per square inch	p.s.i.
m	g	revolutions per minute	r.p.m.
m-molecule	mol	roentgen	R
tz	Hz	second (time)	s
r	h	siemens	S
rnational unit	i.u.	tesla	T
le	J	tonne (10^6 g)	t
vin*	K	unit of pressure (mm Hg)	Torr
gram	kg	volt	V
e	l	watt	W
tre	m	weber	Wb
nute	min		

* Temperatures given in degrees are on the Celsius scale unless otherwise indicated.

The following prefixes may be used in conjunction with the symbols—

Fraction	*Prefix*	*Symbol*	*Multiple*	*Prefix*	*Symbol*
10^{-1}	deci	d	10	deka	da
10^{-2}	centi	c	10^2	hecto	h
10^{-3}	milli	m	10^3	kilo	k
10^{-6}	micro	μ	10^6	mega	M
10^{-9}	nano	n	10^9	giga	G
10^{-12}	pico	p	10^{12}	tera	T
10^{-15}	femto	f			
10^{-18}	atto	a			

Abbreviations of journal titles used in the abstracts are, in general, those of the 'World List Scientific Periodicals' (4th Edn, 1964, Butterworths, London), but all diacritical marks are itted and the German ä, ö and ü and the Scandinavian ø (or ö) are transliterated as ae, oe, ue d oe, respectively. The language in which an original paper is written is English unless herwise specified.

The chemical nomenclature used in the abstracts may differ from that in the original articles d is that recommended by The International Union of Pure and Applied Chemistry ('Nomen- ture of Organic Chemistry', Sections A and B, 3rd Edn, and Section C, 2nd Edn, Butterworths, ndon, 1971; 'Nomenclature of Inorganic Chemistry', Butterworths, London, 1971).

When known, the Colour Index (C.I.) designations of dyes are generally included. The mes given to enzymes are those recommended by the International Union of Pure and Applied emistry and the International Union of Biochemistry ('Enzyme Nomenclature', Elsevier ientific Publishing Co., Amsterdam, 1973). When possible, drugs are specified by their official P. or B.P.C. names, or by the Approved Names recommended by the British Pharmacopoeia mmission (8 Bulstrode Street, London, W1M 5FT). The principal Pharmacopoeias are noted by, *e.g.*, B.P., U.S.P. or Eur.P., together with the identifying roman numeral or year. sticides are named in accordance with the British Standard 1831 : 1969, 'Recommended Common ames for Pesticides' (British Standards Institution, 2 Park Street, London, W1A 2BS).

System of Numbering Abstracts

The abstract designation consists of three parts (left to right):

(1) *Issue Number.* A number 1 to 6 corresponding to the monthly issue number in a given volume. (There are two volumes of six separate monthly issues each year.)

(2) *Section Letter.* Each subject section is indicated by a letter of the alphabet A to J (the letter I is avoided to prevent possible confusion).

(3) *Abstract Number.* An individual number of the abstract within its section. The numbers start with 1 in each section of each issue and run consecutively throughout the section.

ERRATA

Some errata subsequently published in the journals abstracted are included in the following list. Whe the initials of given names in the Author Index and in the abstracts do not agree, the Index should b assumed to be correct.

VOL. 19, 1970

Abstract

No.	*Line*	
2497	4	*insert* Coll., London, W.C.2, England). *J. Chromat.*, 1969, *after* King's
2497	10	*insert* 2·5% of XE-60 - QF-1 - MS-200 (46:27:27) sup- *after* of
2497	13	*delete this line*

VOL. 26, 1974

Abstract

No.	*Line*	
1858	13	*for* Part I *read* Part II
2199	1	*insert* **Studies on quality of pharmaceutical preparations. VII.** *before* **Applications**
2199	2	*for* **II.** *read* **2.**

VOL. 28, 1975

Index, p. A5, column 3, *entry for* British Standards Institution, line 2, *for* 25B2 *read* 2B25
Index, p. A6, column 1, *entry for* Busch, K. W., *insert* , 4D6 *after* 1A1C

Abstract

No.	*Line*	
2B43	3	*for* Jager, H. *read* Jaeger, Helmut

Appropriate modification should be made to the Author Index for Vol. 28.

VOL. 29, 1975

Index, p. A32, column 3, *entry for* Romer, T. R. *for* 5D12 *read* 5G12
Index, p. A34, column 2, *for* Schumacher, F. *read* Schumacher, E.
Index, p. A40, column 2, *for* Vandenbalick, J. L. *read* Vandenbalck, J. L.

Abstract

No.	*Line*	
1E7	14	*for* Part XII *read* Part XIII
4B219	3	*for* Munoz Leiva, *read* Munoz Leyva,
5J21	1	*for* **glyco** *read* **glycol**

VOL. 30, 1976

Abstract

No.	*Line*	
1B19	3	*for* Kohri, K. N. *read* Johri, K. N.
1B45	2	*insert* **sulphide** *after* **lead**
1B177	3	*for* Parkhomomenko, E. A. *read* Parkhomenko, E. A.
1E39	2	*this line should read* **meric amphetamines and related amines. I. Structural effects some diastereoisomer separations.** Souter,
2B1	6	*for* 997–981 *read* 977–981
2D71	3	*for* Frolich, J. C. *read* Froelich, J. C.
2D91	2,3	*for* Mahmoud, A. El-Sayed *read* El-Sayed, Mahmoud A.
2H5	3	*for* Kronsborg, O. J. *read* Kronborg, O. J.
2J10	9	*this line should read* graphy (with, *e.g.*, 3,3′-oxydipropionitrile as station-
3B167	17	*for* Co (5) anthanum *read* Co (5). Lanthanum
3G50	12	*for* on *read* or
3H13	3,4	*for* Cooke, Mulik M. *read* Mulik, J.; Cooke, M.;
3J13	25	*for* 1975 *read* 1976
4D49	3	*for* Dehennim, L. *read* Dehennin, L.
5B211	7,8	*delete* (For Part II see *Analyt. Abstr.*, 1976, **30**, 4B159.)
5C43	10	*for* alumian *read* alumina
5C58	2	*for* Sokolowsa, Jadwiga *read* Sokolowska, Jadwiga
5G21	22	*insert*) *after* fluorodensitometry
5H6	9	*insert* of a *after* 25 ml

SUBJECT INDEX

ganic compounds are indexed under the parent compounds, except under the headings **Indicators** d **Reagents, organic,** and the lists of reagents under specific elements. Esters and salts of organic ds are indexed under the names of their acid constituents. References to **Cosmetics, Dyes, Enzymes,** scellaneous **Optical devices** and minor items of **Laboratory apparatus** will be found under these adings. Patents are indicated by *P*, and books and conference papers (titles only) by *B* and *C* pectively, following the abstract number.

A

AB, see *Benzimidazole, 2-amino-*
etaldehyde, detmn. in air, by g.c., review, 3D50
in beer, by g.l.c. of head-space vapours, 3F34
in vapour phase of tobacco smoke, by g.c., 3D53
, dichloro-, detmn., colorim., stability of soln. used in, 3G40
etamide, sepn. from related compounds, by g.c., 3C24
, *NN*-dimethyl-, sepn. from related compounds, by g.c., 3C24
, *N*-methyl-, sepn. from related compounds, by g.c., 3C24
etaminophen, see *Paracetamol*
etanilide, 4′-nitro-, detmn. in products of its reduction, polarogr., 3C34
etate, detmn. in biol. fluids, by g.l.c., 4D38
in biol. tissues or blood serum, by g.l.c., as benzyl acetate, 3D64
, chloro-, sepn. from dichloro- and trichloro-acetates, ion-exchange chrom., 5J17
, dichloro-, sepn. from chloro- and trichloro-acetates, ion-exchange chrom., 5J17
, trichloro-, sepn. from chloro- and dichloro-acetates, ion-exchange chrom., 5J17
cetic acid, detmn., conductim., 5C4
in aq. soln., by g.l.c., extraction conditions for, 4C20
in industrial wastes, by g.c., 3H47
in Polyamide 6, by g.c., 4C75
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
– anhydride, detmn., conductim., 5C4
volum., indicator for use in morpholine method for, 6C26
– esters, sepn. of isomeric, by h.p.l.c., 3J11
– —, n-alkyl, plasma-chrom. study of, 3C20
– —, ethyl, detmn. in beer, by g.l.c. of head-space vapours, 3F34
– —, isopentyl, detmn. in beer, by g.l.c. of head-space vapours, 3F34
– —, methyl, detmn. in beer, by g.l.c. of head-space vapours, 3F34
– —, phenethyl, detmn. in beer, by g.l.c., 1F16
– —, vinyl, detection and detmn. in aq. polymer emulsions, by g.c., 3C75
detmn. in dispersions containing butyl acrylate, by g.l.c., 1C71
of combined, in its copolymers with vinyl chloride, by isotope dilution, 3C79
of purity of, by measurement of capacitance changes during melting of sample, 5C1
– salts, lead(IV), detmn. of Pb^{IV} in, complexom. - potentiom., 4B75
of U in, by n.a.a., 1B75
– —, sodium, detmn., volum., in dimethyl sulphoxide medium, 5C14
Acetic acid, 1,2-bis-(2-aminoethoxy)ethane-*NNN′N′*-tetra-, detmn., coulom., 6C30
—, bromo-, ethyl ester, detmn. in wine, by g.l.c., 1F21
—, *trans*-cyclohexane-1,2-diamine-*NNN′N′*-tetra-, detmn., coulom., 6C30
—, diethylenetriamine-*NNN′N″N″*-penta-, detmn., coulom., 6C30
—, (3,4-dihydroxyphenyl)-, detmn. in cerebrospinal fluid, by g.l.c. of pentafluoropropionyl deriv., 2D39
in nervous tissue, by g.l.c. of hexafluoroisopropyl ester of trifluoroacetyl deriv., 2D40
—, dimethylstannylenebisthiodi(-, di-iso-octyl ester, analysis, German official methods for, 4F11
—, fluoro-, sodium salt, detmn. in biol. materials, by g.l.c. of fluoroacetate ester, 2D48
—, 5-hydroxyindol-3-yl-, detmn., artefact arising in Lindqvist method for, 5D63
spectroph., continuous photochem. method for, 5D64
in biol. tissues, fluorim., 3D88
in cerebrospinal fluid, fluorim., 2D95
in urine, by g.l.c. - m.s. of trimethylsilyl deriv., 2D94
—, 3-hydroxy-4-methoxyphenyl-, detmn. in nervous tissue, by g.l.c. of hexafluoroisopropyl ester of trifluoroacetyl deriv., 2D40
—, 4-hydroxy-3-methoxyphenyl-, detmn. in cerebrospinal fluid, by g.l.c. of pentafluoropropionyl deriv., 2D39
in nervous tissue, by g.l.c. of hexafluoroisopropyl ester of trifluoroacetyl deriv., 2D40
in urine, by g.l.c., 6D44
identn. and detmn. in amniotic fluid, by g.l.c. and g.l.c. - m.s. of pentafluoropropionyl deriv. of methyl ester, 6D43
—, indol-3-yl-, detmn., fluorim., 4G19, 4G20
in potatoes, by t.l.c., 3G21
in urine, by g.l.c. - m.s. of trimethylsilyl deriv., 2D94
—, mercapto-, detmn., potentiom., 6C32
with S^{2-}-sensitive electrode, 6C33
—, nitrilotri-, detmn. in cadmium-plating electrolytes, volum., 5B77
in water in presence of other carboxylic acids, by g.l.c., 3H36
—, sulpho-, esters, analytical methods for, 4C60
—, tetrazolyl-, analysis of mixtures of isomers of, and of ester analogues of, by n.m.r., 2C48
—, thiodi-, detmn. in urine, by g.l.c. of methyl ester, 5D36
—, triethylenetetramine-*NNN′N″N‴N‴*-hexa-, detmn., coulom., 6C30
Acetohydroxamic acid, as analytical reagent, 6A8
Acetoin, see *Butan-2-one, 3-hydroxy-*

Acetone, detection and detmn. in oilseed meals and flours, by g.l.c., 4G18
detmn., conductim., 5C4
in air, by g.c., review, 3D50
device for, 1J3
in biol. materials or water, by g.c., pre-concn. method for, 5H33
in methyl methacrylate, by g.l.c., 5C58
of K and Na in, flame photom., 1C4
explosion hazard from mixture with H_2O_2 of, 4A23
identn. and detmn. in isobutyl or isopropyl alcohol, by g.l.c., 4C14
—, **acetyl-,** see *Pentane-2,4-dione*
Acetophenone, detmn. in waste water, by g.c., 1H47
—, **4′-hydroxy-,** detmn., bromim., 2C37
—, **2,2′,4′,5′-tetrachloro-,** sepn. from other tetrachlorvinphos metabolites and detection, by t.l.c., 4G34
—, **2,4,5-trichloro-,** sepn. from other tetrachlorvinphos metabolites and detection, by t.l.c., 4G34
Acetyl chloride, trichloro-, detmn. in air, pulsed-flow coulom., 1H8
Acetylcholinesterase, see under *Enzymes, specific*
Acetyldisulphanilamide, detmn. in pharmaceutical preparations, by t.l.c. - densitom., 3E42
Acetylene, detmn., by g.l.c., 2C56
in chlorination products of methane, by g.c., 1C17
in ethylene, by g.l.c., 4C9
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
identn. in pyrolysis products of methane, by g.c., 6C13
identn. and detmn. in vinyl chloride, by g.l.c., 1C70
Acetylene derivatives, detmn., by g.l.c., 2C56
β-*N*-Acetylglucosaminidase, see under *Enzymes, specific*
Acetylmethadol, see *Methadyl acetate*
***N*-Acetylmuramoyl-L-alanine amidase,** see under *Enzymes, specific*
Acids, see also *Carboxylic acids*; *Sulphonic acids*
analysis of mixtures of strong and weak, potentiom., 3A8
detmn., see also *Indicators, acid - base*
potentiom., 4A15
linear-response reagent for, 4A16
of di- and tri-basic, potentiom., detmn. of equivalence-points and pK values in, 6A16
diagrams for graphical detmn. of pH values of monofunctional, 6J69
universal acidity scale, 1A8
Aconitic acid, sepn. of *cis-* and *trans*-isomers of, from other citric-acid-cycle acids and from each other, liquid chrom., 1D41
Acridine, paper-chrom. study of, in formamide - formic acid media, 6C59
Acridinium chloride, 3,6-diamino-, detmn. in presence of 3,6-diamino-10-methylacridinium chloride, paper chrom. - spectroph., 4E37
—, **3,6-diamino-10-methyl-,** detmn. in presence of 3,6-diaminoacridinium chloride, paper chrom. - spectroph. or volum., 4E37
Acrylamide, detmn. in presence of Na 4-vinylbenzenesulphonate, polarogr., 3C81
Acrylic acid, detmn. of monomeric, in polymers, u.v. spectroph., 3C76
— **esters, butyl,** detection and detmn. of monomeric, in aq. polymer emulsions, by g.c., 3C75
detmn. in dispersions containing vinyl acetate, by g.l.c., 1C71
Acrylic acid esters—*continued*
— —, **ethyl,** detection and detmn. in aq. polyme emulsions, by g.c., 3C75
detmn. of monomeric, in polymers, u.v. spec troph., 3C76
— —, **methyl,** detmn. in methyl methacrylate, b g.l.c., 5C58
Acrylonitrile, detection and detmn. in aq. polyme emulsions, by g.c., 3C75
detmn. in its copolymers, by pyrolysis - g.l.c 1C72
Acrylonitrile derivatives, sepn., by g.l.c., 5C16
Actin, detmn., gel electroph. - spectroph., 2D119
Actinidia chinensis, see *Chinese gooseberry*
Actinoids, computer analysis of X-ray spectra fro mixtures of, 1A1C
Actinium, detmn. of ^{227}Ac in minerals, ores or rock by n.a.a., 6B91
Actinium-series elements, detmn., α-spectrom., 3B7
Activation analysis, see *Radioactivation analysis*
Acyl-CoA synthetase, see under *Enzymes, specific*
Acylesterase, see under *Enzymes, specific*
Adamantane, 1-(2-methylaminopropyl)-2-phenyl-, detmn., by g.l.c. of chlorodifluoroacetyl deriv. 6E30
Adamantane derivatives, aza-, sepn., by g.l.c., 6C6
Adenine, detmn. in blood, blood plasma or plasm fractions, by t.l.c., 2D44
in malt wort, by h.p.l.c., 1F15
in single-cell protein sources, u.v. spectroph. 5D84
of ^{14}C-labelled, by adsorption on cellulos nitrate filters, 5D103
fluorescence reaction of, 2D140
identn. and detmn. in presence of guanine oscillopolarogr., 4D67
—, **8-aza-,** sepn. of metabolites of, gel chrom. 2D141
Adenine derivatives, fluorescence reaction of, 2D14
Adenosine, detmn. in malt wort, by h.p.l.c., 1F15
Adenosine deaminase, see under *Enzymes, specific*
Adenosine phosphates, paper-electroph. study of 3D110
—, **cyclic 3′,5′-mono-,** detmn., by protein-bindin method, possible interference by trichloro acetate in, 2D139
in adipose tissue, by protein-binding method 6D70
in bone tissue, by protein-binding method 1D86
of ^{32}P-labelled, in biol. tissues, scheme fo 3D111
—, **5′-mono-,** cyclic-voltamm. study of, and of F complexes of, 2A1C
—, **tri-,** binding to ammonium formate during ge filtration of, 4D65
detmn., by bio-luminescence method, 5D87
by kinetic - bio-luminescence method, 1D87 1D88
in activated sludge, by bio-luminescenc method, 5H45
sepn. from 4-nitrophenyl phosphate and PO_4^{3-}, b ion exchange - t.l.c., 1D107
—, **3′-, 5′-phosphate,** detmn. in biol. materials, b bio-luminescence method, 3D112
—, —, **5′-sulphatophosphate,** detmn. in biol materials, by bio-luminescence method, 3D11
Adenosine 5′-phosphosulphate kinase, see *Enzyme specific*, APS-kinase
Adenosinetriphosphatase, see under *Enzyme specific*
Adenylate cyclase, see under *Enzymes, specific*
Adhesives, characterisation of acetylated phenol formaldehyde, by n.m.r., 6C70

dhesives—*continued*
detmn. of phenol - formaldehyde, in paper or wood, problems arising in, 6C83
dhumulone, detmn. in hop extracts, by n.m.r., 5F51
dipic acid, detection and detmn. in baking powder, by g.l.c. of trimethylsilyl deriv., 2F33
detmn., non-aq. conductim., 4C2
dipose tissue, detmn. of cAMP in, by protein-binding method, 6D70
of hexachlorobenzene in, by g.l.c., 4D31
of melengestrol acetate in, by g.l.c., 5D33
dlupulone, detmn. in hop extracts, by n.m.r., 5F51
drenaline, detmn., automated fluorim., 3D89
by chemiluminescence method, 5E4
by continuous-flow photochemical oxidation - spectroph., 1E3
in blood plasma, blood serum, erythrocytes or urine, by g.l.c., 1D25
in presence of noradrenaline, fluorim., 1E8
in urine, improved trihydroxyindole method for, 2D88
liquid chrom. - fluorim., 6D55
erosols, analysis, and particle size analysis, by m.s., 1J95
analysis of marine, electron microsc. - X-ray emission spectrom., 6H3
detmn. in air, review, 3H1
of atmospheric H_2SO_4, photom., 6H12
mathematical study of collection at circular aperture of particles of, 1H1
particle size analysis, by light-scattering method, 5J120
by sedimentation, with use of ultra-microscope, 5J122
electrical instrument for studies of submicro-particles, 3A1*C*
with use of diffusion battery, 1J96
with use of Nuclepore filter sampler, 1J97
of atmospheric, with Coulter counter, 5A3*C*
of particles trapped on fibre filter, by microscopy, 1J94
flatoxins, detection, fluorescence reaction for, 5F14
in cottonseed, sampling for, 2G14
in feeding-stuffs, by dialysis - t.l.c., 5G22
detmn., fluorim., 2F20
in cottonseed products, collaborative study of simplified AOAC method for, 2G15
with use of Zn acetate for extract purification, 2F22
in foods, review, 5F1
identn., by t.l.c. - m.s., 4F8
t.l.c. study of, 1F7
– **B_1,** detection in presence of aflatoxin G_1, laser fluorim., 2D75
detection and detmn. in feeding-stuffs containing citrus pulp, by t.l.c., 3G17
detmn. in fruit products, by t.l.c., 6F6
in roasted maize, by t.l.c., 2F21
m.s. study of detoxification product of, 1F8
purification, by t.l.c., 5G21
– **B_2,** purification, by t.l.c., 5G21
– **D_1, dehydro-,** identn., by m.s., 5D41
– **G_1,** detection in presence of aflatoxin B_1, laser fluorim., 2D75
purification, by t.l.c., 5G21
– **G_4,** purification, by t.l.c., 5G21
– **M_1,** detmn. in milk, by t.l.c., 4F9
Agglomerates, detmn. of Mn in, complexom., 2B146
Agmatine, detmn., spectroph., 3C23
Air, see also *Breath*; *Dust, atmospheric*; *Humidity*
analysis, generation of aerosol standards for evaluation of filter-media for, 2A1*C*
review of methods used in coal-gas-production industry, 3C58
of pollutants in, applications of m.s. in, review, 6J63
by thermal-gradient technique, 5A3*C*
analysis and sampling of pollutants in welding atmospheres, 5H1
control of pollution of, 1H49*B*
detection of pollutants in, by X-ray fluorescence, 5A3*C*
correlation technique for remote i.r. monitoring, 1H4
detmn. of acetaldehyde, acetone, CO, ethanol and lower hydrocarbons in, by g.c., review, 3C50
of bis(chloromethyl) ether in, by g.l.c. - m.s., 1H18
of bis(chloromethyl) ether and chloromethyl methyl ether in, by g.l.c., 1H17
of Cs, Ru and Sr in, radiochem., 1A1*C*
of CS_2 in industrial, by a.a.s. or potentiom., 1H7
of CO in, by kinetic - spectroph. method, 4H6
colorim., 4H7
continuous coulom., 4H8
spectroph., permeation apparatus for, 2H8
of $COCl_2$ in, pulsed-flow coulom., 1H8
of C_2 to C_6 carboxylic acids in, by g.c., 5H15
of Cl in, by g.c., 3B131
of combustible gases in, device for, 1J3
of diethylamine in, by equilibrium-concn. method, 6H15
of dimethyl diselenide and dimethyl selenide in, by g.c. - a.a.s., 6H18
of dimethyl terephthalate and accompanying products in, by g.l.c., 5H16
of 4,4-dimethyl-1,3-dioxan in, 6H19
of elements in, by a.a.s., review of atomisation techniques in, 5J49
by m.s., 6H4
by n.a.a., sampling for, 2J149
of ethylene in, in presence of other alkenes, by indirect a.a.s., 5H13
of explosives in, by isotope dilution - m.s., 5H17
of F^- in, automated potentiom., with ion-sensitive electrode, 2H13
colorim., 6H14
of hydrocarbons in, by m.s., 6H4
continuous-monitoring instrument for, 6H16
of H^3H in, 1A1*C*
of HCN in, with collection on filter-paper, 4H9
of Pb in, by a.a.s., 3H9
of Pb in molecular and particulate forms in, by a.a.s., 3H8, 4H10
of Pb in org. form in, by a.a.s., adsorption technique for, 4H14
of Hg in, automated spectroph., 3B56
by a.a.s., multi-stage sampler for, 3H7
portable collection device for, 4H5
collection on silver gauze for, 1H6
emission spectrom., 5B80
of Hg in metallic and org. forms in, by a.a.s., collection - sepn. assembly for, 5H4
of Hg species in, 5A3*C*
of NO in, spectroph., 2H9
of NO_2 in, by alkali trapping - fluorim., 6H8
coulom., 4H11
fluorim., with laser excitation, 1H10
spectroph., 2H9
of odorous compounds in, by g.s.c., 4C69

Air, determination—*continued*
of O_3 in, by chemiluminescence method, 6H10
iodim., 2H11
spectroph., 3H10
of pesticides in, by g.l.c., air-borne apparatus for, 4J29
sampling and extraction methods for, 3G28
of phosphine in, reflectance spectroph., with use of mixed-indicator test-strip, 6H24
of phthalic acid esters in, by g.l.c., 6H20
of pollutants in, 5A3*C*
applications of tunable lasers in, 6J33
by g.c., use of graphitised carbon black as trapping material in, 4H13
diffusion cell for preparation of dil. vapour concn. for, 3H4
evaluation of efficiencies of sorbents for, and desorption of org. compounds from sorbents, 1H14
i.r. spectroph., 2A1*C*
selection of resonant frequencies in, 6H6
Raman spectrom., system for, 3H3*P*
review, 2H2
of polychlorinated biphenyls in, by g.l.c., 6H20
of pyridine deriv. in, photom., 4H17
of SiF_4 in, by g.c., 3B131
of SO_4^{2-} in, review, and improved $BaCl_2$ method for, 3H11
of S compounds in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
of SO_2 in, coulom., 1H11
radiom., 1H12
of SF_6 in, by g.c., 1H13
by m.s., 6H13
of H_2SO_4 aerosol in, photom., 6H12
of tetraethyl- and tetramethyl-lead in, by a.a.s., 1H19
of tributylphosphine in, spectroph., 5H14
of vinyl chloride in, by g.c., 3H12, 5J25
by g.l.c., 3C80
standards for, 6C85
with use of Stark-modulated absorption of i.r. laser radiation, 1H16
of H_2O in, automatic digital microwave instrument for, 2H7
of H^3HO in, 1A1*C*
identn. and detmn. of chlorinated hydrocarbons in, by g.c. - m.s., 6H17
methods for measurement and monitoring of quality in, 3H1
sampling devices for, 4H2, 6H1
balloon-borne low-temp., 1H2
low-power, programmable, non-reactive, for field use, 3H2
system for supply of constant-composition pollutant-contaminated, 1J1
Alanine, sepn. of enantiomers of, by h.p.l.c. of *N*-(+)-camphor-10-sulphonyl deriv. of 4-nitrobenzyl esters, 2D100
—, **3,4-dihydroxyphenyl-,** detmn., automated fluorim., 3D89
—, **phenyl-,** sepn. of enantiomers of, by h.p.l.c. of *N*-(+)-camphor-10-sulphonyl deriv. of 4-nitrobenzyl esters, 2D100
Alanine aminotransferase, see under *Enzymes, specific*
Albumin, detmn., regional survey, 4A1*C*
in blood serum, by dye-binding method, 2D124
of mercapto-groups in serum, amperom., 5D75
Alcohols, see also *Diols*; *Polyols*
detection of low-mol.-wt., in urine, by g.c. - m.s., 5A2*C*
Alcohols—*continued*
detmn., by g.l.c., new deriv.-forming reagent fo 6D38
conductim., 5C4
g.c. study of, 3C14
identn. and detmn. of primary aliphatic, colocynth-seed oil, by t.l.c. - g.l.c., 5E20
paper-chrom. study of sugar, 6D2
sepn., by g.c., 3J33
derivatisation for, review, 5J27
by h.p.l.c., 2C14
from their benzoates and from each other, b g.l.c., 4C11
of *cis*- and *trans*-isomers of acetates of fatt by h.p.l.c., 1C26
—, **C_2 to C_4,** identn., by g.l.c., 5C2
—, **C_5 to C_{27},** sepn. and detmn. of primary, b g.l.c., 2C15
—, **C_5 to C_{31},** sepn. and detmn. of primary, b g.l.c., 4C12
—, **C_9 to C_{14},** sepn. and detmn. of secondary, b g.l.c. of acetates, 4C13
—, **C_{24} to C_{32},** identn. in *Convolvulus pluricaulis*, b t.l.c. - g.l.c., 3E18
Aldehydes, analysis, photom., 3C93*B*
detmn. in air, sorbents for, 1H14
in oxidation products of carbohydrates, liqui chrom. - spectroph., 2C16
g.c. study of, 3C14
identn., by g.l.c. - m.s. of 2,4-dinitropheny hydrazones, 2F9
identn. and detmn. in enzymic-oxidation produc of linoleic acid, by g.l.c., 4F36
sepn., by g.c., derivatisation for, review, 5J27
of isomeric, by h.p.l.c., 3J11
—, **aliphatic,** detection, colour reaction for, an detmn., spectroph., 1C25
detmn., spectroph., 2C18
—, **aromatic,** sepn., by g.c., 3J34
Aldicarb, detmn. in presence of other carbama pesticides, by t.l.c. - enzymic, 2G34
Alditols, detmn., spectroph., 4C16
sepn. and identn., by g.l.c. - m.s. of butan boronate deriv., 6C20
Aldonic acids, detmn. in sulphite spent liquors, b g.l.c. of corresponding alditol acetates, 3C72
identn. and detmn., spectroph., 6C23
sepn. of oligomers of, ion-exchange chrom., 6C
—, **2-*C*-methyl-,** identn. and detmn., spectroph 6C23
Aldosterone, sepn. from other corticosteroid automated gel chrom., 1D58
Aldrin, detection and detmn. in tinctures extracts, by t.l.c., 4E47
detmn., by g.l.c., 4J31
Alfalfa, see *Lucerne*
Alginates, detmn. in protein-rich foods, by pptr 1F14
Alkali metals, detmn. in minerals, ores or rock flame spectroph., 2B27
Alkali-metal chlorides, detmn. of Fe in, by a.a.s 5B190
Alkali-metal halides, analysis, by a.a.s., no selective absorption of radiation in, 5B28
detmn. of Ag in single crystals of, spectropl 5B29
Alkali-metal hydroxides, detmn. of Ni in, b chemiluminescence method, 5B30
Alkali-metal salts, a.a.s. study of, 1B24
detmn. of Ni in, by chemiluminescence metho 5B30
Alkaline-earth metals, sepn., displacement chron 6B58

raline-earth-metal compounds, detmn. of Mn in, by luminescence method, 5B62
raline-earth-metal salts, a.a.s. study of, 1B24
raline-earth-metal titanates, detmn. of O deficit in, spectroph. or volum., 3B52
raloids, bibliography of electroph. studies of, 5J20
comparison of reagents for pptn. of, 5E8
detection, by t.l.c., with use of fluorescamine, 3E12
of *Datura*, in feeding-stuffs or foods, by t.l.c., 1F5
detmn. in crude drugs, by TAS technique, 2E8
in extracts or tinctures, by ion exchange - complexom., 6E6
volum., 2E7
in pharmaceutical preparations, volum., 2E5
of t-amino-group-containing, fluorim., 5E7
n.p.l.c. studies of, review, 5E6
paper-chrom. study of use of bis-(2-ethylhexyl) phosphate as extractant for, 2E4
sepn., by h.p.l.c., 3E1
by t.l.c., 1J18
of *Rauwolfia*, by t.l.c., 4E17
of *Strychnos*, by h.p.l.c., 2E9
sepn. and detmn. in opium, by h.p.l.c., 4E11
sepn. and identn., by t.l.c., 6E1
sepn., identn. and detmn. of tall-fescue or rye-grass, ion-exchange chrom. - paper chrom. (or t.l.c.) - densitom., 3G18
hydrochlorides, detmn., volum., 2E6
kanes, see also *Cycloalkanes*
g.l.c. study of, 3C7
identn. and detmn. in colocynth-seed oil, by t.l.c. - g.l.c., 5E20
NO chemical-ionisation m.s. study of, 6C11
sepn. from alkenes, by g.s.c., effect of sample size in, 2C12
-, **bromo-,** sepn., by g.c., 3J34
-, ***vic*-bromomethoxy-,** identn. of isomeric and diastereoisomeric, by g.l.c., 1C18
sepn. of diastereoisomeric, by g.l.c., 3C9
-, **C_4 to C_8 n-,** sepn., by g.c., 3J35
-, **C_{12} to C_{15} n-,** identn., by g.l.c., 5C2
-, **chloro-,** analysis of mixtures of, by g.c., 6C98
by g.l.c. - fluorescent-indicator adsorption analysis, 4C8
detmn. in biol. materials, by g.l.c., elimination of interference by chlorinated aromatic compounds in, 2D51, 2D52
sepn., by g.c., 3J34
-, ***vic*-dibromo-,** identn. of isomeric and diastereoisomeric, by g.l.c., 1C18
sepn. of diastereoisomeric, by g.l.c., 3C9
-, **halo-,** detmn., volum., and analysis of mixtures of, electroph. - volum., 2C13
-, ***gem*-halonitro-,** detection, by chemiluminescence method, 2C23
-, **iodo-,** preparation of standard mixtures of, by irradiation of I - alkane mixtures, and analysis of mixtures of, by g.l.c., 1C20
-, **thia-,** preparation of, as reference compounds for identn. of S-containing compounds in petroleum, 2C55
lkanesulphonic acid derivatives, analysis, German standard methods for, 3C61
lkenes, analysis of products of bromination in methanol medium of, by g.l.c., 1C18
identn. in their copolymers with vinyl acetate, by pyrolysis - g.l.c. - m.s., 3C78
NO chemical-ionisation m.s. study of, 6C15
sepn., liquid chrom., 6C17
from alkanes, by g.s.c., effect of sample size in, 2C12
-, **C_1 to C_5,** sepn., by g.l.c., 6C16
Alkoxy-groups, detmn. in S-containing compounds, modified Zeisel method for, 2C11
Alkynes, C_4 to C_{10}, g.l.c. study of, 4C10
Allophanates, detmn. in polyurethans, potentiom., 1C75
Allopregnanediol, detmn. in urine, by g.l.c., 3D76
Alloys, see also under names of constituent metals
detmn. of elements in, by a.a.s., 3B6, 3J59
sample preparation of, by spark-discharge machining, 2A1*C*
Almond oil, detection of rapeseed oil in, 5F63
Aloe emodin, sepn. from chrysophanol, emodin and physcion, by h.p.l.c., 3E15
Aloin, detmn., improved D.A.B. VII method for, 5E18
Alphaxalone, detmn. in blood plasma, by t.l.c. - g.l.c. of trimethylsilyl deriv., 5D26
Altosid, see *Methoprene*
Aluminium, analysis of anode gas from production of, by g.c., 4B51
detection in radiopharmaceuticals, colour reaction for, 6E40
detmn., by a.e.s., with use of heated-graphite atomiser, 2B10
by n.a.a., 2J150
by thermom. titration, 6B5
fluorim., 1B55
gravim., 1B12
oscillopolarogr., 3B60
ring colorim., 6B68
spectroph., 1B54, 4B45, 5B87, 6B70
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
in alloys, spectroph., 5B88
in alloys, fumes or slags, by n.a.a., 3B99
in AMS alloy, complexom., 1B18
in bauxite, by n.a.a., 4B50
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by a.a.s., 3D8
in boric acid, by electrolysis - spectrogr., 5B85
in boron carbide, photom., 2B55
in boron nitride, spectrogr., 5B86
in cadmium, spectroph., 1B48
in cement raw-mix slurries, by n.a.a., system for, 2J151*P*
in Cr - Ni alloys, photom., 5B164
in copper ores, by n.a.a., 5B43
in feldspar, emission spectrom., with ion-beam excitation, 4J44
in ferrosilicon alloys, by a.a.s., 4B146
in gold, fluorim., 4B31
in hornblende, X-ray emission spectrom., 3J57
in inclusions in iron, by electrolysis - spectrogr., 5B191
in industrial wastes, spectroph., 3H46
in iron, by n.a.a., 5B192
in lanthanum or lanthanum oxide, spectrogr., 1B65
in minerals, ores or rocks, flame spectroph., 4B69
in petroleum or petroleum products, by a.a.s., 3C42
in plants, by a.a.s., 6J54
direct-reading emission spectrom., 2D5
spectrogr., 5D1
in plutonium, by a.a.s., 2B67
in presence of Ti, complexom., 5B125
in radiopharmaceuticals, spectroph., 6E40
in sediments, by a.a.s., 6H26
in silica, spectroph., 6B117
in silicates, with electron micro-probe, 4B66
in soil, by a.a.s., comparison of extractants for, 3G6

Aluminium, determination—*continued*
in soln., spectrogr., 6B69
in steel, by n.a.a., 5B192
emission spectrom., 1B144, 2B142, 4B145
in tin, spectrogr., 6B131
in tungsten or tungsten compounds, comparison of methods for, 4B125
in uranium, by a.a.s., 2B67
in urine, by n.a.a., 5A5*C*
in water, 6H29
by n.a.a., 2H16
spectrogr., 5H19
of As in, emission spectrom., 3B62
of Be in, by a.a.s., 3B61
of Co, Au and Ag in, by a.a.s., 5A5*C*
of Ga in, by n.a.a., 2B57
fluorim., 1B57
photom., 6B73
of impurities in, by a.a.s., 1B56
concn. methods for, 4B46
of Mg in, emission spectrom., 1J39
of Mn in, by n.a.a., 4B47
of Ag in, spectroph., 3B45
fluorescence reaction of, 4B43
sepn. from Cd, Ga, Au, In and Sc, by ion exchange, 1B2
from Ga, In and Tl, liquid chrom., 6B72
from highly saline matrices, by selective pptn., 6B12
from Fe, by solvent extraction, 1B7, 1B136
by t.l.c., 2B136
from Hg, by solvent extraction, 6B67
from Ti, by t.l.c., 3B95
from V, by solvent extraction, 5B151
solvent extraction of, with β-diketones, 1B7
with bis-(2-ethylhexyl) hydrogen phosphate, 1B93
with diphenylguanidine - glycinecresol red, 6B71
standard methods for analysis and testing of pigments based on, 1C76
X-ray mass-absorption-coeff. for, 2B56
Aluminium, reagents for, aluminon, 2B55
3-amino-5-sulphosalicylic acid, 4B43
antipyrine - quercetin, 5B87
apigenin, 4B45
bromopyrogallol red - triethylhexadecylammonium iodide, 1B54
catechol violet, 6B117
catechol violet - hexadecylpyridinium iodide, 6B70
cetrimide - Chrome Azurol S, 5B88
Eriochrome Azurol B, 6E40
4-(4-hydroxyphenyliminomethyl)resorcinol, 1B55
8-hydroxyquinoline, 3H46, 4B31
poly-(8-hydroxy-5-vinylquinoline), 6B12
quinalizarin, 6E40
8-(toluene-*p*-sulphonamido)quinoline, 1B12
Aluminium alloys, detmn. of Be in, by a.a.s., 3B61
of Co in, spectroph., 5B204
of Cu in, potentiostatic method for, 4B48
of elements in, emission spectrom., 2B58
of Ga in, spectroph., 4B44
of H in, by g.s.c., 3B20
of Ti in, complexom., 5B125
spectroph., 4B147
identn. and detmn. of elements in, flame emission spectrom., 3B63
method for dissolution of samples of, 1B1
phase analysis, and electrochem. dissolution of, 5B19
—, **Al - Cu,** detmn. of Fe in, polarogr., 2B135
Aluminium bromide, g.l.c. study of, 1B5
Aluminium chloride, detmn. in aq. soln. containi
other chlorides, by capillary-tube sepn. electric field, 6B3
g.l.c. study of, 1B5
Aluminium complex, with acetylacetone, gel-chro
study of, 3B22
Aluminium hydroxide, detmn. of CO_2 in gels of,
g.c., 2E53
Aluminium oxide, see also *Corundum*
detmn. of Na in, potentiom., with ion-sensiti
electrode, 5B89
Amarogentin, sepn. from other bitter principles,
t.l.c., and detmn. in gentian root, 3E16
Amaropanin, sepn. from other bitter principles,
t.l.c., and detmn. in gentian root, 3E16
Amaroswerin, sepn. from other bitter principles,
t.l.c., and detmn. in gentian root, 3E16
Americium, co-pptn. of Am^{III}, Am^{V} and Am^{V}
1B80
detmn. in chemical-processing plant waste, 2A7
in curium, spectrogr., 6B108
in environmental materials, radiochem., revie
2A7*C*
in sea-water, by electro-deposition, 4H23
in small animal carcases, 2A7
of ^{241}Am in bovine tissues, 1A1*C*
sepn. from Ce, Eu and Y, ion-exchange chrom
2B72
from Cm and rare-earth metals, liquid chrom
6B107
solvent extraction of, from HNO_3 soln. wi
alkylene and vinylene deriv. of phosphi
oxide, 1B79, 6B106
Amethocaine *N*-oxide, detmn. in urine, by g.l.c.,
methyl 4-(butylmethylamino)benzoate, 2D38
Amide groups, detmn., gasom., 6C9
Amide-nitrogen, detmn. in vegetable oils,
acidic extraction - Kjeldahl method, 3F50
Amides, detmn. of ^{15}N in plant, by t.l.c. - emissi
spectrom., 2D105
—, **C_1 to C_4,** sepn. from their *N*-methyl and *N*
dimethyl deriv. and from each other, by g.
3C24
—, **thio-,** detmn. in pharmaceutical preparation
potentiom., 4A2*C*
Amidopyrine, detmn., by chemiluminescen
method, 5E4
in biol. materials or pharmaceutical prepar
tions, by g.l.c., 2D29
in pharmaceutical preparations, by t.l.c. - u.
spectroph., 5E31
Amines, see also *Diamines*; *Polyamines*
analysis of metabolites of biogenic, in brain tiss
or cerebrospinal fluid, by m.s. of pentafluor
propionyl deriv., 4D52
detection and detmn. in rapeseed oil, by t.l.c
g.l.c., 2F8
detmn., biamperom., 5C17
in methanol, by kinetic - spectroph. metho
6C18
of primary, fluorim., 2A1*C*
of primary or secondary, colorim., 3C22
of secondary, in foods, by nitrosation - g.l.
4F5
of tertiary, fluorim., 5E7
spectroph., 1E4
g.l.c. study of, 4C24
retention of surfactant, by ion exchangers, 2H
sepn., by g.c., derivatisation for, review, 5J27
of enantiomeric, by g.l.c. of diastereoisome
1E39, 6E28
specificity of Folin and Lowry reagents for, 2D
— ***N*-oxides,** detmn., differential pulse polarog
6C10

ines, aliphatic, detmn. of primary, apparatus for Van Slyke method for, 1C11
in presence of amino-acids and NH_3, spectroph., 2D85
sepn., by ligand-exchange g.l.c., 6C27
paper chrom., 1C27
aromatic, detection in presence of azomethine deriv., colour reactions for, 4C37
of primary, colour reaction for, 1C41
letmn., automated potentiom., 1C36
iodim., 4C39
voltamm., with use of passivated hanging-mercury-drop electrode, 5C33
in water, spectroph., 1H37
of primary, by t.l.c. - fluorim., 4D20
of tertiary, by g.l.c. of ring-trifluoroacetylated deriv., 3C33
dentn. and detmn. in food dyes or food additives, by t.l.c., 2F34
sepn. and identn. in vulcanised rubber, by g.l.c. - i.r. and u.v. spectroph. - t.l.c., 1C81
ino-acids, analysis, by g.l.c. of heptafluorobutyryl deriv. of isobutyl esters, 4D55
by g.l.c. of trifluoroacetyl deriv. of butyl esters, 4D56, 5D67
by g.l.c. - m.s. of heptafluorobutyryl deriv. of isoamyl esters, 2D104
by h.p.l.c., 6A1*C*
by h.p.l.c. - fluorim., 2D96
by h.p.l.c. of phenylthiohydantoin deriv., 6D60
by t.l.c. of dansyl deriv. - fluorim., 1D65
ion-exchange chrom. - spectroph., 2D98
continuous monitoring of radioactivity of effluents in, 5A2*C*
gradient-elution system for, 4D54
of uniformly ^{14}C-labelled yeast, 1D66
conversion of thiazolinone deriv. of, to thiohydantoins, 1D80
detmn., comparison of methods for, 5D68
potentiom., enzyme electrode for, 2J138
in brewing materials, review of automated and semi-automated methods for, 4F28
of ^{15}N in plant, by t.l.c. - emission spectrom., 2D105
extraction from sediments or soil, with use of superheated water, 3G12
g.l.c. studies of, review, 2D102
identn., by diastereoisomer formation, 4D56
isolation of *N*-methylated basic, from biol. fluids or protein hydrolysates, ion-exchange chrom., 2D101
paper-chrom. study of, 6D2
paper-electroph. study of, in strong-acid media, 6D62
sepn., automated liquid-chrom. system for, 5J10
by g.c., derivatisation for, review, 5J27
by h.p.l.c. of phenylthiohydantoin deriv., 3D91
by t.l.c., 1J18, 3D97
by t.l.c. of fluorescein - thiohydantoin deriv., 6D61
electroph. - t.l.c., 1D64
ion-exchange chrom., 5D66
automated high-pressure instrument for, 5J16
semi-automatic apparatus for, 2D99
ligand-exchange chrom., 2D97
paper electroph., 1J12
from blood, blood serum or urine, filtration device for, 3D90
of enantiomers of, by g.l.c. of L-menthyl, *N*-perfluoroacyl-L-menthyl or *N*-perfluoroacyl-L-bornyl esters, 2D103

Amino-acids, separation of enantiomers—*continued*
by g.l.c. of *N*-trifluoroacetyl deriv. of propyl, isopropyl, butyl or isobutyl esters, 2D103
by h.p.l.c. of *N*-(+)-camphor-10-sulphonyl deriv. of 4-nitrobenzyl esters, 2D100
review of chrom. methods for, 5D65
of indolic, artefact arising in Lindqvist method for, 5D63
of mixtures of dansyl and 2,4-dinitrophenyl deriv. of, paper chrom., 3D93
sepn. and detmn., by t.l.c. of 4-(4-dimethylaminophenylazo)benzenesulphonyl deriv. - spectroph., 3D94
paper chrom. - gravim., 3D92
Amino-groups, detmn., gasom., 6C9
in proteins, spectroph., 2A1*C*
of primary and secondary, in polyamide, spectroph., 2C73
Aminolaevulinate dehydratase, see *Enzymes, specific,* porphobilinogen synthase
δ-Aminolaevulinate synthase, see under *Enzymes, specific*
Amino-nitrogen, detmn., by $KHSO_4$ fusion - coulom., 3C2
in organosilicon compounds, coulom., 5C25
in vegetable oils, by acidic extraction - Kjeldahl method, 3F50
of α-, in beer or wort, automated spectroph., 5F49
in brewing materials, review of automated and semi-automated methods for, 4F28
Aminopeptidase, see under *Enzymes, specific*
Amino-sugars, detmn. in glycoproteins, ion-exchange chrom. of borate complexes - colorim., 2D130
sepn. and detmn. in glycopeptides or glycoproteins, by methanolysis - g.l.c. of trimethylsilyl deriv. of *N*-acetyl deriv., 1D40
Amitriptyline, detmn., by g.l.c. or u.v. spectroph., 2D36
in blood serum, by g.l.c. of trimethylsilyl deriv., 4D26
by oxidation - g.l.c., 3D40
in presence of nortriptyline, by h.p.l.c., 3D39
identn., by t.l.c., 3E4
of decomposition products of, by t.l.c., 4E35
solvent extraction of, with toluene, 6D15
Ammonia, detection in water, electrochem., 2A4*C*
detmn., potentiom., comparison of electrodes for, 3B105
with gas-sensing electrode and mini-computer, 6B145
with ion-sensitive electrode, flow-injection system for, 3J6
in gas mixtures, potentiom. sensor for, 1J72
from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in industrial wastes, sample preservation for, 3H45
in methanol, with amines, by kinetic - spectroph. method, 6C18
in tobacco smoke, by g.c., 3D17
of NH_4NO_3 in aq. soln. of, 6B146
of ^3H-labelled, by radio - g.c., 6B19
sepn. from diamines and polyamines, by t.l.c. of dansyl deriv., 3D86
Ammonia-nitrogen, detmn. in phosphate fertilisers, volum., 5G9
in water or waste water, potentiom., with NH_3-sensing electrode, 4H24
Ammonium chloride, 3-(6,11-dihydro-2-methylbenzo[*b*,*e*]thiepin-11-ylidene)propyldimethyl-, see *Methadienium chloride*

Ammonium compounds, quaternary, m.s. study of, 1E48
—, **benzyldimethyloctadecyl-, chloride,** detmn., fluorim., 4C59
—, **decyltrimethyl-, bromide,** detmn., fluorim., 4C59
—, **dodecyltrimethyl-, chloride,** detmn., enzymic - spectroph., 2C65
—, **tetrabutyl-,** detmn., potentiom., electrode for, 3B105
—, **tetraethyl-, iodide,** field-desorption m.s. study of, 3B8
Ammonium ion, detection in water, electrochem., 2A4*C*
detmn., potentiom., ion-sensitive electrode for, 3J83
in fruit juices or urine, ion-exchange chrom., 5J17
—, **alkyl-,** sepn. and detmn., ion-pair partition chrom. - u.v. spectroph., 2C22
Ammonium nitrate, detmn. in aq. NH_3 soln., 6B146
Ammonium salts, field-desorption m.s. study of, 2C4
Ammonium tungstate, detmn. of Al, Fe and Si in, comparison of methods for, 4B125
Amniotic fluid, detmn. of lecithin - sphingomyelin ratio in, paper chrom., 6D45
identn. and detmn. of monoamine metabolites and related compounds in, by g.l.c. and g.l.c. - m.s., 6D43
Amperometry, integrator for, 2J141
Amphetamine, detmn. in pharmaceutical preparations, by Schiff base formation - g.l.c., 5E36
identn., by t.l.c., 3E4
Amphetamine derivatives, sepn., by h.p.l.c., 3E1
of enantiomeric, by g.l.c., 1E39
Ampicillin, analysis of degradation products of, by h.p.l.c., 4E22
detmn., fluorim., 3D33
in pharmaceutical preparations, complexom., 3E20
Amylase, see under *Enzymes, specific*
Amylobarbitone, detmn. in presence of other barbiturates, by t.l.c. - u.v. spectroph., 6D19
study of 77 K luminescence of, 2E27
Amylopectin, detmn., spectroph., double-wavelength method for, 5F18
Anabasine, *N*-nitroso-, sepn. from *N*-nitroso-anatabine and -nornicotine, by t.l.c., 2D90
Anacardic acid, detmn. in cashew-nut-shell liquid, by g.l.c. of methyl ester, 4C91
Analginum, see *Dipyrone*
Analytical chemistry, applications of, in nuclear technology, report of conference on, 2A7
of pattern-recognition techniques in, review, 6A19
computerised pattern-recognition technique for, 6A20
data fitting by least squares in, 6A4
information content of results in, 3A2, 4A7
principles and practice of, 6A21*B*
procedure for detmn. of elements present in concn. below detection limit, 4B1
reports of conferences on, 1A1, 2A1
review of 1910–1970 literature, 1A2
standardisation of quantitative procedures in, 2A8
standardised examination of selectivity in, 4A8
standardised measurement and evaluation in, 4A8
use of principal-component analysis for evaluation of errors in methods for, 5A8
use of stochastic processes in measurement of noise-contaminated electronic signals in, 1A12
Analytical standards, bis-(2,3-dimethyl-1-phenyl pyrazolin-5-one) perchlorate and bis-(1-butyl 2,6-dimethylpyridin-4-one) perchlorate a 2A15
drying of Tris for use as, 3A4
for analysis of leaves, 2D4
for coal and fly ash analysis, 3B170
for earth sciences, 2B159
for g.c. detmn. of trace org. compounds gaseous mixtures, 2J32
for n.a.a. of biol. materials, 3D6
for n.a.a. of geological materials, 2B160, 6B22 6B230
for N and O analysis in steel, 6B204
for pH detmn., 6J73*B*
for volum. analysis, drying and weighing c 5A11
glass filters as, for spectrophotometry, 6J68*B*
graphite powder as, for spectrogr. analysis, 6J4
precious-metal ore as, 5B209
preparation of borax as, 6A11
proposed certification factor for minerals a 3B169
saccharin not recommended for use as, 4A11
Anatabine, *N*-nitroso-, sepn. from *N*-nitros anabasine and -nornicotine, by t.l.c., 2D90
Ancymidol, detmn. in formulations or technic materials, by g.l.c., 2G22
Androsta-4,16-dien-3-one, sepn. from related cor pounds, gel chrom., 3D80
Androst-4-ene-3,17-dione, analysis of enzymic co version products of, by h.p.l.c., 4D46
5α-Androst-16-en-3α-ol, sepn. from related cor pounds, gel chrom., 3D80
5αAndrost-16-en-3β-ol, sepn. from related cor pounds, gel chrom., 3D80
Androst-5-en-17-one, 3β-hydroxy-, detmn. in blo plasma, by m.s., effect of ampicillin administr tion in, 6D50
5α-Androst-16-en-3-one, sepn. from related cor pounds, gel chrom., 3D80
Androsterone, detmn. of conjugated, in blo plasma, by m.s., 6D50
Anethole, detmn. in waste water, by g.c., 1H47
Aneurine, see *Thiamine*
Anhydrotetracycline, detmn. in tetracycline, h.p.l.c., 3E21
by t.l.c. - fluorim. (or u.v. spectroph), 5E2
by t.l.c. (or liquid chrom. or paper chrom. spectroph., 3E22
Anilide groups, detmn., gasom., 6C9
Anilides, detmn. of ω-chloro-acid, iodim., 4C39
Aniline, detection, by t.l.c. - enzymic, 3D120
detmn., colorim., 3C22
of metabolites of, sources of errors in, 2D40
—, **chloro-,** sepn. of isomers of, by h.p.l.c., 1C42
—, **4-chloro-*N*-methyl-,** detmn. of metabolites sources of errors in, 2D50
—, **diethyl-,** detmn., by g.l.c., 2C30
in tri-isopropyl phosphite, i.r. spectrop 6C35
—, ***NN*-diethyl-2,6-dinitro-4-trifluoromethyl-,** detmn. in vegetables or water, polarogr., 3H
—, ***NN*-dimethyl-,** detmn., by g.l.c. of ring-trifluo acetylated deriv., 3C33
—, **dimethyl-4-nitro-,** detmn. in bis-(4-nitrophen sulphide, potentiom., 1C43
—, ***N*-methyl-,** detmn., voltamm., with use passivated hanging-mercury-drop electro 5C33
—, **4,4′-methylenedi-,** detmn., potentiom., 3C82
—, ***N*-methyl-*N*,2,4,6-tetranitro-,** see *Tetryl*
—, **4-(4-nitrophenylthio)-,** detmn. in bis-(4-nit phenyl) sulphide, potentiom., 1C43

niline—*continued*
, 4,4′-oxydi(-, detmn. in bis-(4-nitrophenyl) sulphide, potentiom., 1C43
, pentachloro-, detmn. in lettuce or soil, by g.l.c., 2G23
, 4,4′-thiodi(-, detmn. in bis-(4-nitrophenyl) sulphide, potentiom., 1C43
iniline derivatives, sepn., by t.l.c., 4C35
, (ethyl-*m*-tolyl)-, sepn. of enantiomers of, 6C49
, nitro-, sepn., by g.c., 3J34
iniline hydroxylase, see *Enzymes, specific,* aryl monooxygenase
nions, detmn., by inhibition effects in a.e.s., 2A1*C*
indirect coulom., review, 5B12
with use of redox columns, 3B2
paper-chrom. study of, 3B3
sepn. of inorg., by g.c., derivatisation for, review, 5J27
-Anisidine, detmn. in waste water, by g.c., 1H47
-Anisidine, detmn. of metabolites of, sources of errors in, 2D50
nisidine derivatives, sepn., by t.l.c., 4C35
nisole, detmn., by g.l.c., 2C30
–, butylated hydroxy-, see *Phenol, t-butyl-*4-*methoxy-*
nkerite, detmn. in coal, by d.t.a., 4B170
nnatto, detmn. in whey, spectroph., 6F18
nona muricata, identn. and detmn. of sugars in, by g.l.c. of trimethylsilyl deriv., 2F30
nthocyanins, sepn., by h.p.l.c., 5F59
of plant, liquid chrom., 2D131
nthracene, detmn. in carbazole, u.v. spectroph., 3C39
sepn. from other hydrocarbons, by h.p.l.c., 2H10
nthracene derivatives, detmn. of S impurity in, by combustion - volum., 5C5
nthranilic acid methyl ester, detmn. in beverages or essences, by t.l.c. - fluorim., 6F25
nthranilic acid, *N*-methyl-, methyl ester, detmn. in beverages or essences, by t.l.c. - fluorim., 6F25
–, *N*-phenyl-, as redox indicator, 2A18
ntibiotics, bibliography of electroph. studies of, 5J20
detmn. of cyclic octapeptide, in fermentation media, spectroph., 4E24
of polypeptide, by h.p.l.c., 6A1*C*
sepn., and detmn. of impurities in, by h.p.l.c., 2E16
Antimony, co-pptn. of, with hydrated oxides, 5B147
detection, colour reaction for, 5B106
detmn., by a.a.s., 5J49
by automated Schmidt technique, 3B18
extraction method for, 3B109
with use of micro-probe - flame - adapter atomiser, 3B7
by a.f.s., 3B110
by molecular-emission-cavity analysis, 2B99
by radiom. titration, 5B145
cerim., indicator for, 4A13
coulom., 1B86
photom., 6B151
potentiom., ion-sensitive electrode for, 3B111
spectroph., 5B7
stripping chronopotentiom., 5B11
stripping voltamm., 6B152
effect of Hg concn. in, 6B15
volum., reversible indicators for, 5B144
X-ray emission spectrom., diluent effects in, 1B14
in air-borne dust, by n.a.a., 2H5, 6H5
in boron nitride, spectrogr., 5B86
in cadmium sulphate, spectrogr., 5B78
Antimony, determination—*continued*
in cadmium sulphide, anodic-stripping voltamm., 4B36
in copper, by co-pptn. on hydrated zirconium oxide - spectroph., 5B147
in environmental materials, by g.c. - emission spectrom., 3D19
in hair, by n.a.a., 6D12
in ion-exchange resins, by a.a.s., 5B142
in lead alloys, X-ray emission spectrom., 6B135
in minerals, ores or rocks, by n.a.a., 5B148
in presence of As, automated potentiom., 2B97
of As and Bi, polarogr., 1B104
of As and Sn, amperom. or biamperom., 2B82
of Bi, Pb and Te, by luminescence method, 2B18
of Se, anodic-stripping voltamm.. 5B146
in silver, stripping voltamm., 6B43
in tin, by n.a.a., 5B124
in tin salts, by chemiluminescence method, 6B132
in water, by n.a.a., 2H16
spectrogr., 1H24
in zinc sulphide, anodic-stripping voltamm., 4B36
of carrier Sb in antimony-124, by isotope dilution, 4B93
of Sn in, spectroph., 1B33
sepn. from As, Hg and Sn, paper electroph., 3B16
from In and Sn, by solvent extraction, 6B130
from Pb, ion-exchange chrom., 6B134
solvent extraction of, with metal dithiocarbamates, 5B1
with quaternary ammonium nitrates, 6B1
Antimony, reagents for, crystal violet, 5B147
2,2′-[pyridine-2,6-diylbis(methylidynenitrilo)]-diphenol, 5B106
Rhodamine B ethyl ester, 5B7
Antimony(III) bromide, g.l.c. study of, 1B5
Antimony(III) chloride, detmn. in gallium chloride, by g.l.c. - a.a.s., 3B65
g.l.c. study of, 1B5
Antimony(V) fluoride, detmn., potentiom., in anhyd. HF media, 4B16
Antimony sulphide, detmn. of S in semiconductor, gravim., 5B159
Antioxidants, g.c. study of rubber, 4A5*C*
Antipyrine, see *Phenazone*
Apoatropine, detmn. in presence of atropine and related compounds, u.v. spectroph., 3E10
Apomorphine, detmn. in faeces or urine, by g.l.c. of trimethylsilyl deriv., 3D29
Apple butter, detmn. of patulin in, by h.p.l.c., 2F18
Apple juice, detmn. of benzoic and sorbic acids in, u.v. spectroph., 3F19
Apples, detmn. of organochlorine pesticides in, by vapour-phase purification - g.l.c., 4G30
Applied chemistry, 6A24*B*
APS-kinase, see under *Enzymes, specific*
Arabinose, detmn., enzymic - spectroph., 6F10
in presence of other carbohydrates, by t.l.c. - densitom., 3C13
Arabitol, sepn. from other polyols, by t.l.c. or paper chrom., 3C11
Arbutin, detmn. in pharmaceutical preparations, paper chrom. - u.v. spectroph., 1E11
Arctostaphylos uva-ursi, see *Bearberry*
Arecoline, detmn. in crude drugs, by TAS technique, 2E8
Arginase, see under *Enzymes, specific*
Arginine, detmn., enzymic - spectroph., 1D69, 3D1
spectroph., 3C23
Arginine-esterase, see under *Enzymes, specific*

Argon, detmn. in sea-water, by n.a.a., 6H46
of leaks of, through seals of liquid-sodium pumps, by n.a.a., 5A5*C*
sepn. from He and Kr or from H, Kr and Xe, by g.c., 3B84
Aroma compounds, technique for trapping and evaluation of, 3F1
Aromatic compounds, g.l.c. study of substituted, 3C31
Arsenate, detmn., by indirect a.a.s., 5B22
potentiom., enzyme electrode for, 3J84
Arsenic, concn., by co-pptn. on $MnO(OH)_2$, 4B15
detmn., a.c. stripping polarogr., 6B149
anodic-stripping voltamm., 3B107, 6B150
differential pulse, 3B107
automated potentiom., 2B97
by a.a.s., 2B99, 3D20, 5J49
arsine generator for, 2F4
by automated Schmidt technique, 3B18
with use of micro-probe - flame - adapter atomiser, 3B7
by molecular-emission-cavity analysis, 2B99
cerim., indicator for, 4A13
coulom., 1B86
volum., fluorescent indicator for, 6B148
in air-borne dust, spectrogr., 3H5
in aluminium, emission spectrom., 3B62
in biol. materials, by a.a.s., 3D8
by n.a.a., 4D5
review, 3D18
in biol. materials in protein-bound form, by gel filtration - n.a.a., 3D11
in boron nitride, spectrogr., 5B86
in detergents, by a.a.s., 3F5
in drugs, by a.a.s., 4E2
in environmental materials, by g.c. - emission spectrom., 3D19
in foods, by a.a.s., 3F5
in ion-exchange resins, by a.a.s., 5B142
in iron, spectroph., comparison of methods for, 1B152
in lead alloys, X-ray emission spectrom., 6B135
in metallurgical samples, by a.a.s., 2A1*C*
in minerals, ores or rocks, by isotope dilution, 1G8
spectroph., comparison of methods for, 1B152
in plants, X-ray emission spectrom., 3D7
in presence of Sb, volum., indicators for, 5B144
of Sb and Bi, polarogr., 1B104
of Sb and Sn, amperom. or biamperom., 2B82
of Pb, X-ray emission spectrom., 5B141
in sediments, *in situ* X-ray emission spectrom., 6H25
in soil, by isotope dilution, 1G8
by n.a.a., 6G4
in steel, spectroph., comparison of methods for, 1B152
in tin, by n.a.a., 5B124
in tin oxide, X-ray spectrom., 3B91
in titanium dioxide, by n.a.a., 5B128
in tobacco leaves, by n.a.a., 5D7
in urine, by n.a.a., 4D6
in water, 6H29
by a.a.s., 3F5
comparison of methods for, 3H29
indirect, 3H28
in wine, X-ray emmision spectrom., 3D7
of distribution of, in silicon, by n.a.a., 6B115
of Ge in, spectroph., 5B143
of inorg., and of mono- and di-methylarsine in water or urine, by g.l.c. of diethyldithiocarbamates, 5H30
of inorg. and org., in water or urine, by a.a.s., 5H29

Arsenic—*continued*
sepn. from Sb, Hg and Sn, paper electroph., 3B
from Hg, by solvent extraction, 6B67
from other elements, by g.s.c., 3B83
solvent extraction of, with metal dith
carbamates, 5B1
Arsenic, organic compounds of, decomposition p
cedure for, 1C2
detmn. in herbicide formulations or water,
reduction - g.l.c., 6G7
Arsenic, reagent for, diethyldithiocarbamic acid
salt, 1B152
Arsenic(III) bromide, g.l.c. study of, 1B5
Arsenic(III) chloride, g.l.c. study of, 1B5
Arsenic(III) oxide, detmn., volum., 3B108
drying and weighing of, 5A11
Arsine, dimethyl-, detmn. in urine or water, by g.l
of diethyldithiocarbamates, 5H30
—, **hydroxydimethyl-, oxide,** detmn. in herbici
formulations or water, by reduction - g.l.c., 6
—, **methyl-,** detmn. in urine or water, by g.l.c.
diethyldithiocarbamates, 5H30
—, **trimethyl-,** sepn. from other organometallic co
pounds, by g.l.c., 6C36
—, **triphenyl-, oxide,** detmn., polarogr., 3C27
Arsonium salts, field-desorption m.s. study of, 2C4
—, **tetraphenyl-,** detmn., spectroph., 5C24
Aryl monooxygenase, see under *Enzymes, specific*
Asbestos, fibres in Lake Superior, 2A4*C*
Ascorbic acid, detection and detmn., by t.l.c., co
parison of sorption layers and spray reagen
for, 1E26
detmn., automated constant-current coulon
2E25
by chemiluminescence method, 5E4
by continuous-flow photochemical oxidatio
spectroph., 1E3
differential pulse polarogr., 1E21
spectroph., 2A14
in feeding-stuffs or foods, with dehydroascorb
acid, spectroph., 5F72
in foods, turbidim., 1F24
in fruit juices or squashes, volum., 6F29
in fruit juices or vitamin tablets, volum., 5E
in mineral salt mixtures, by ion exchang
volum., 4G13
in pharmaceutical preparations, potentior
6E18
u.v. spectroph., 2E24
in vegetables, spectroph., with use of alcol
slurries, 2F50
identn. and detmn. in Chinese gooseberry fruit,
g.l.c. of trimethylsilyl deriv., paper chrom.
t.l.c., 2F31
losses from Ribena during storage, 1F25
— **sodium salt,** detmn., automated constant-curre
coulom., 2E25
Asparagine, sepn. from aspartic acid, glutamic ac
glutamine, glycine, serine and threonine,
t.l.c., 3D97
Aspartate aminotransferase, see under *Enzym*
specific
Aspartic acid, paper-chrom. study of ethyl esters
3D96
sepn. from asparagine, glutamic acid, glutami
glycine, serine and threonine, by t.l.c., 3D9
Aspirin, detmn. in blood plasma, in presence
salicylamide and salicylic acid, by g.l.c.
trimethylsilyl deriv., 1D23
in pharmaceutical preparations, by t.l.
fluorim., 5E30
in presence of caffeine, paracetamol and phe
cetin, by t.l.c., 4E27

spirin, determination in presence—*continued*
of caffeine, paracetamol, phenacetin and salicylamide, or of salicylic acid, by h.p.l.c., 1E27
of caffeine sodium benzoate and phenacetin (or codeine phosphate), volum., 2E31
of codeine and phenacetin, volum., 4E30
of paracetamol and salicylamide, non-aq. potentiom., 4E28
of acetylsalicylic anhydride in, spectroph., 2E32
statine, sepn. from other elements, by g.s.c., 3B83
tenolol, detmn. in biol. materials, by g.l.c. of heptafluorobutyryl deriv., 1D26
TP phosphoribosyltransferase, see under *Enzymes, specific*
trazine, detmn., by alkylation - g.l.c., 2G33
in medicinal plants, by t.l.c., 1G13
in soil, with its hydroxy-analogue, by g.l.c. of methyl deriv., 1G14
-, ***N*-nitroso-,** detmn., by h.p.l.c., 2F14
tropic acid, detmn. in presence of atropine and related compounds, u.v. spectroph., 3E10
tropine, comparison of reagents for pptn. of, 5E8
detmn., fluorim., 1E33
in pharmaceutical preparations, spectroph., 2E10
u.v. spectroph., 4E14
in presence of its degradation products, u.v. spectroph., 3E10
in solanaceous plants, by g.l.c. or spectroph., 4E15
sepn. from emetine, hyoscine and strychnine, paper chrom., 2E4
utomated methods, applications of, in pesticides analysis, review, 3G30
assay-rate multiplier for, 6J5
data-logging system for steady-state continuous-flow analysers for, 4J6
zathioprine, detmn. of H_2O in, coulom., 2E2
zobenzene, detmn., coulom., 6A13
-, **2-amino-,** detmn. in Fast yellow, by t.l.c., 2F34
-, **4-amino-,** detmn. in Fast yellow, by t.l.c., 2F34
zobenzene derivatives, sepn., thread chrom., 6C51
zo-compounds, detmn., coulom., 6A13
zomethine derivatives, detection of aromatic, colour reaction for, 4C37

B

HA, see *Phenol, t-butyl-4-methoxy-*
HT, see p-*Cresol,* 2,6-*di-t-butyl-*
OD, see *Biochemical oxygen demand*
acitracin, reduction of microbial levels in powder, 6A1*C*
acon, detmn. of *N*-nitroso-compounds in fried, by g.c., 4F6
akery products, see also *Bread; Biscuits*
aking powder, detection and detmn. of org. acids in, by g.l.c. of trimethylsilyl deriv., 2F33
alances, see under *Weighing*
ananas, detmn. of thiabendazole on, by t.l.c. - fluorim., 2G25
arbitone, detmn. in presence of other barbiturates, by t.l.c. - u.v. spectroph., 6D18
arbiturates, detmn., by g.l.c. of pentafluorobenzoyl deriv., 6E23
by indirect a.a.s., 4E26
in blood serum or urine, by g.l.c., 6D19
identn., colour reaction for, 6E22
sepn., by g.l.c. of free acids, 3E28
sepn. and identn., by t.l.c., 5E28, 6E24
paper chrom., 2D28
Barbituric acid, 5-allyl-5-isobutyl-, detmn. in biol. materials or pharmaceutical preparations, by g.l.c., 2D29
—, **thio-,** polarogr. study of, 5E29
Barium, detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
detmn., a.c. amperom., 1B8
by thermom. titration, 6B5
colorim. or complexom., effect of presence of Na acetate and $NaClO_4$ in, 1B41
complexom., indicator for, 6B60
gravim., 1B42
spectroph., 5B61
in air-borne dust, emission spectrom., 4H4
in biol. materials, by a.a.s., 3D8
in ferrites, complexom., 6B206
X-ray spectrogr., 2B138
in magnetic materials, automated potentiom., 2B137
in minerals, ores or rocks, spectrogr., 6B13
X-ray spectrom., 5B66, 5B67
in oil additives, by n.a.a., 3C55
in petroleum or petroleum products, by a.a.s., 2C50
flame emission spectroph., 6C65
in phosphate baths, volum., indicator for, 2B113
in plants, by a.a.s., 6J54
direct-reading emission spectrom., 2D5
in sediments, by a.a.s., 6H26
in silicates, X-ray emission spectrom., 4B67
in silicon alloys, by n.a.a., 4B34
in sodium, by a.a.s., 5B31
in strontium compounds, 6B61
in water, by n.a.a., 2H16
sepn. from Cd, Cu, Mn, Hg, Ni, Pd, Ag, V and Zn, by selective pptn., 1B42
from Cs and Mg or from K and Sr, paper chrom., 3B3
from Cu, or from Hg and Ag, by ion exchange, 5B20
Barium, reagents for, 2,7-bisazo-deriv. of chromotropic acid, 5B61
metalphthalein, 1B41
3-nitro-*N*-(*m*-tolyl)benzohydroxamic acid, 1B42
Se analogues of azolidines, 5B2
Barium fluoride, detmn. of impurities in, by m.s., 3B29
of rare-earth metals in, spectrogr., 6B59
Barium orthotitanate, detmn. in barium titanate powder, by kinetic - spectroph. method, 2B45
Barium salts, detmn. in aq. soln., by β-ray back-scattering, 5B18
Barium sulphate, detmn. of Pb in mixtures with $PbSO_4$ of, gravim., 4B172
Barium titanate, detmn. of Ba_2TiO_4 in powders of, by kinetic - spectroph. method, 2B45
of O deficit in, spectroph. or volum., 3B52
Barley, detmn. of 2,4-D, dicamba and mecoprop in, by g.l.c. of methyl esters, 4G22
of 2,4-D and dichlorprop in free and bound forms in, by g.l.c. of methyl deriv., 2G20
of oil, protein and H_2O in, near-i.r. reflectance spectroph., 3G5
of proteins in, comparison of methods for, 5F50
Basalt, detmn. of Co, Au, Pb and V in, by a.a.s., 2B77
Bases, detmn., coulom., electrode for, 5J102
non-aq. coulom., with use of polarised quinhydrone electrodes, 1C3
potentiom., 4A15
linear-response reagent for, 4A16
diagrams for graphical detmn. of pH values of monofunctional, 6J69

Bases—*continued*
solvent extraction of org., from acidic aq. soln. with non-polar or weakly polar solvents, 4C23
Bauxite, detmn. of Al and Si in, by n.a.a., 4B50
thermal gas analysis of, 5A6*C*
Bay oil, detmn. of eugenol in, by g.l.c., 3C65
Beans, detmn. of chloramben in Lima, by t.l.c. - densitom., 2G21
of maleic hydrazide in green, spectroph., collaborative study of, 5G37
of P in dried, continuous-flow spectroph., 5G2
of tryptophan in protein of, spectroph., 5G5
Bearberry, detmn. of quinol in leaves of, paper chrom. - spectroph., 3D59
Beef, detmn. of lipids in ground, or in blends with soya of, comparison of methods for, 1F11
of *N*-nitroso-compounds in canned, by g.c., 4F6
Beer, COS not formed as artefact during incubation of, 3F29
characterisation, by partition-chrom. analysis of constituent sugars, 5F47
detmn. of α-amino-N in, automated spectroph., 5F49
of As in, by a.a.s., 3F5
of CO_2 in, conductim., 5F53
of carbonyl compounds in, flash-exchange chrom., 1F17
of catechin and dimeric catechin in, by g.l.c. of trimethylsilyl deriv., 1F18
of Cl^- in, potentiom., with ion-sensitive electrode, 3F31
of Cu and Fe in, by a.a.s., 3F32
of free fatty acids in, by g.l.c., 3F36
of original extract content of, refractom. - densitom., 5F52
of original gravity of, 3F28
of O dissolved in, comparison of commercial analysers for, 4F32
potentiom., with O-selective electrode, 5F54
of O in contents of bottles of, gasom., 5F55
of SO_4^{2-} in, turbidim., with use of haze meter, 3F30
of total N in, automated spectroph., 5F48
of trace elements in, by a.a.s., 6J55
of volatile compounds in, assessment of variations in results of, 3F33
by g.l.c. of head-space vapours, 3F34
report of brewing chemists' convention, 4A3*C*
sepn. and detmn. of low-volatile compounds in, by g.l.c., 1F16
sepn., identn. and detmn. of lactones in, by g.l.c. - m.s., 3F36
use of polarim. methods in quality control and 'finger-printing' of, 4F31
Belladonna, detmn. of alkaloids in dry extract of, volum., 2E7
in extracts or tinctures of, by ion exchange - complexom., 6E6
identn. of tincture of, in drops, by t.l.c., 4E10
Bencyclane fumarate, t.l.c. study of, 5E41
Benomyl, detmn. in aq. suspension, colorim., 4G26
in Uzgen preparations, by t.l.c. - u.v. spectroph., 3G27
sepn. from 2-aminobenzimidazole, diethirimol, ethirimol and methyl benzimidazol-2-ylcarbamate, by t.l.c., 3G26
Benzaldehyde derivatives, hydroxy-, detmn., bromim., 2C37
Benzamide, *N*-(3-aminophenyl)-, detmn., potentiom., 3C82
Benzanilide, detection and identn., by t.l.c., 4G35
—, **4-nitro-,** detection and identn., by t.l.c., 4G35
Benzanilide derivatives, mononitro-, detmn., polarogr., 4C40
Benz[*a*]anthracene, 7,12-dimethyl-, h.p.l.c. study and of deriv. of, 3C36
Benzene, detmn. in air, device for, 1J3
in biol. materials or water, by g.c., pre-conc method for, 5H33
in presence of alicyclic hydrocarbons, by g.l. 5C28
of cyclohexanol and pentanol, by part extraction - refractom., 5C3
in waste water, by g.l.c., 5H43
of K and Na in, flame photom., 1C4
of thiophen in, evaluation of standard meth for, 4C29
g.l.c. study of, 6C1
identn. in pyrolysis products of methane, by g. 6C13
identn. and detmn. in isopropyl alcohol, by g.l. 4C14
inadequate protection afforded by rubber glo in handling of, 4A20
sepn. from halobenzenes or toluene, by g.c., 3J from other hydrocarbons, by h.p.l.c., 2J10
—, **arsenoso-,** detmn., polarogr., 3C27
—, **butyl-,** detection and detmn. in hexane, by g 3C8
—, **cyclohexyl-,** sepn. and identn. of C_{12} hyd carbons in, by g.l.c., 3C30
—, **ethyl-,** detmn. in waste water, by g.c., 1H47
—, **hexachloro-,** detmn. in adipose tissue, by g.l 4D31
in faeces, by t.l.c., h.p.l.c. or g.l.c., 5D34
in lettuce or soil, by g.l.c., 2G23
—, **nitro-,** detmn. in toluene-nitration products, g.l.c., 6C95
in waste water, by g.c., 1H47
—, **pentachloro-,** detmn. in faeces, by t.l.c., h.p. or g.l.c., 5D34
—, **1,2,3,5-tetramethyl-,** sepn. from durene, circulatory g.l.c., 1C31
—, **1,2,4,5-tetramethyl-,** see *Durene*
—, **1,3,5-trinitro-,** detmn. in toluene-nitration p ducts, by g.l.c., 6C95
Benzene derivatives, detmn. of S impurity in, combustion - volum., 5C5
g.l.c. study of, 3C31
sepn. of mono- and di-substituted, by g.l.c., 6
substituent contributions to Kovats retent indices of, 4C28
—, **1-chloronitro-,** sepn., thread chrom., 6C51
—, **halo-,** sepn. from benzene, by g.c., 3J35
Benzenearsonic acid, 4-hydroxy-3-nitro-, *Roxarsone*
Benzenearsonic acid derivatives, polarogr. study 2C28
Benzenedisulphonic acid derivatives, chloro-, det of isomeric, by g.l.c., 5C35
Benzenesulphonic acid salts, thermal decomposi of, 5A6*C*
Benzenesulphonic acid, 4-amino-2-nitro-, sod salt, detmn. in products of its reduct polarogr., 3C34
—, **4,4′-diazoaminodi(-,** detmn. in F D & C Ye No. 6, by h.p.l.c., 2F37
—, **4-(2,4-dihydroxyphenylazo)-,** detmn., coul 6A13
—, **4-(2-hydroxy-1-naphthylazo)-,** detmn. in F C Yellow No. 6, by t.l.c. - densitom., 2F36
—, **3-nitro-, sodium salt,** detmn. in products c reduction, polarogr., 3C34
—, **4-vinyl-, sodium salt,** detmn. in presenc acrylamide, polarogr., 3C81
Benzenesulphonic acid derivatives, alkyl, analys chloroalkanes used in production of, by g fluorescent-indicator adsorption analysis,

nzenesulphonic acid derivatives, alkyl—*continued*
etmn., enzymic - spectroph., 2C65
carboxy-, sepn. of alkali-metal salts of, and of their *C*-2-hydroxyethyl esters, gel chrom., 2C44
nzenethiol, detmn., pulse polarogr., 5C19
nzene-1,2,4-tricarboxylic acid, see *Trimellitic acid*
nzene-1,2,4-triol, detection and detmn., by t.l.c., 2C36
nzidine, detmn., potentiom., 3C82
nzilate, ion-pair-chrom. study of, 6C47
nzilic acid, detmn., ion-pair partition chrom. - u.v. spectroph., 2C40
nzimidazole, 2-amino-, sepn. from benomyl, diethirimol, ethirimol and methyl benzimidazol-2-ylcarbamate, by t.l.c., 3G26
nz[*cd*]indol-2(1*H*)-one, detmn., with its halogen deriv., in binaphthyldicarboxylic acids, polarogr., 1C52
-Benzodiazepine derivatives, detmn. in biol. fluids, differential pulse polarogr., 2A1*C*
in blood, differential pulse polarogr., 6D25
-Benzodiazepine derivatives, 3-(arylsulphonyl)-2,4-dimethyl-3*H*-, as acid - base indicators, 1A3
-Benzodiazepin-2-one, 7-bromo-1,3-dihydro-5-(2-pyridyl)-, see *Bromazepam*
, 7-chloro-1,3-dihydro-5-phenyl-2*H*-, 4-oxide, detmn. in chlordiazepoxide, spectroph., 4E33
, 7-chloro-5-phenyl-1-prop-2-ynyl-, see *Pinazepam*
nzo[*a*]fluorene, detmn. in water, by g.l.c. - m.s., 3H39
nzoic acid, detmn., non-aq. conductim., 4C2
in foods, automated spectroph., 2F38
u.v. spectroph., 3F19
of purity of, by measurement of capacitance changes during melting of sample, 5C1
drying and weighing of, 5A11
esters, sepn. from their parent alcohols and from each other, by g.l.c., 4C11
—, methyl, detmn. in air, by g.l.c., 5H16
sodium salt, detmn. in aq. soln. containing caffeine, by partial extraction - refractom., 5C3
nzoic acid, 4-amino-, detmn., by indirect a.a.s., 3E27
, 2-benzoyl-5-isopropyl-, detmn., spectroph., 2C41
, 4-chloro-3,5-dinitro-, detmn., spectroph., 2C41
, 4-hydroxy-, detmn. in industrial wastes, by g.l.c. of methyl ester, 6H54
, —, esters, ethyl, t.l.c. study of, 1E52
, —, —, methyl, detmn., by TAS technique - spectroph., 5E2
t.l.c. study of, 1E52
nzo[*ghi*]perylene, detmn. in water, by g.l.c. - m.s., 3H39
nzophenone, detection, by t.l.c., and detmn. in phenytoin sodium preparations, spectroph., 3E30
-, 2-hydroxy-, oxime, detmn. of 5-alkyl-substituted deriv. of, potentiom., 6A6
nzophenone derivatives, detmn. in blood plasma, by t.l.c., 5D20
nzo[*a*]pyrene, detmn. in air-borne dust, by g.l.c., 3H13, 5A1*C*
by t.l.c. - fluorim., 4H16
in meat products, clean-up method for, 5F27
in water, by g.l.c. - m.s., 3H39
in waxes, fluorim., 2C62
h.p.l.c. study of, and of deriv. of, 3C36
nzothiazole, 2-amino-6-methoxy-, detmn., by thermom. titration, 4C50
nzyl alcohol, 2,4-dichloro-, detmn. in pharmaceutical preparations, by g.l.c., 2E38
-, 2,4,5-trichloro-α-(chloromethyl)-, sepn. from other tetrachlorvinphos metabolites and detection, by t.l.c., 4G34
Benzylamine, analysis of condensation products with hexamine of, by m.s., 4C94
—, *N*-nitroso-*N*-phenyl-, detmn., by h.p.l.c., 2F14
Benzylamine oxidase, see under *Enzymes, specific*
Bergamot oil, analysis, by g.l.c., 4C62
Berkelium, solvent extraction of, from HNO_3 soln. with alkylene and vinylene deriv. of phosphine oxide, 1B79, 6B106
Beryl, detmn. of Be in, gravim., 2B41
spectroph., 6B56
Beryllium, detection, pptn. reaction for, 2B41
detmn., by deuteron activation, with coincident measurement of complementary particles, 6B55
by luminescence method, 1B38
complexom., indirect, 5B59
fluorim., 5B60, 6B54
gravim., 1B13, 2B41, 6B52
ring colorim., 6B68
spectroph., 2B42, 3B48, 4B9, 4B32, 6B53, 6B56
volum., 3B47
with electron micro-probe, 2J66
in air-borne dust, by a.a.s., 2H6
emission spectrom., 4H4
spectrogr., 3H6
in aluminium, by a.a.s., 3B61
in copper, by a.a.s., 3B61
in environmental materials, by a.a.s., 6B231
in petroleum or petroleum products, by a.a.s., 6C64
in sediments, by a.a.s., 6H26
in vanadium, spectrogr., 6B155
in water, by g.l.c. of trifluoroacetylacetonate, 2H24
spectrogr., 1H24
of impurities in, polarogr., 6B57
of N in, by γ-activation, 2B89
sepn. from other elements, by t.l.c., 2B6
solvent extraction of, with β-diketones, 1B7
with dil. tributyl phosphate, 6B56
Beryllium, reagents for, *p*-anisidine (or *p*-phenylenediamine) - $K_3Cr(CN)_6$, 4B9
benzidine - NaF, 6B52
Chrome Azurol S - benzylhexadecyldimethylammonium chloride, 6B53
Chrome Azurol S - hexadecyltrimethylammonium ion, 3B48
5,5′-(3,3′-dimethoxy-4,4′-biphenylylenebisazo)bis-(salicylic acid), 4B32
5,5′-(3,3′-dimethyl-4,4′-biphenylylenebisazo)bis-(salicylic acid), 4B32
1,3-di-(2-naphthyl)propane-1,3-dione, 1B38
Eriochrome cyanine R, 6B56
1-hydroxy-2-carboxyanthraquinone, 5B60
2′-hydroxychalcone, 2B41
4-methoxy-*N*-*m*-tolylbenzohydroxamic acid, 1B13
quinizarinsulphonic acid, 6B54
Ti - H_2O_2 - F^-, 2B42
Beryllium alloys, detmn. of impurities in, polarogr., 6B57
—, Be - Cu, detmn. of Be in, spectroph., 2B42
Beryllium complexes, with acetylacetone, gel-chrom. study of, 3B20
with malonic, oxalic, nitrilotriacetic and 3,3′,3″-nitrilotripropionic acid and edta, 3B47
Beryllium fluoride, detmn. of rare-earth metals in, spectrogr., 6B59
Bes, see *Ethanesulphonic acid,* 2-[*bis*-(2-*hydroxyethyl*)*amino*]-
Betaine, detmn. in feeding-stuffs, by g.l.c. of trimethylsilyl deriv., 3G16
Beta-ray back-scattering, analyses of alloys and salt soln. by, 5B18

Beverages, detection and detmn. of maltol and ethylmaltol in, by t.l.c., 1F4
detmn. of CO_2 in, conductim., 5F53
of methyl anthranilate and methyl *N*-methyl-anthranilate in, by t.l.c. - fluorim., 6F25
of trace elements in, by a.a.s., 6J55
—, **alcoholic,** see also *Beer*; *Wine*
detection of di-n-octyltin compounds in, by a.a.s., 5F43
detmn. of Cd, Cu and Pb in, inverse voltamm., 3F2
—, **non-alcoholic,** detmn. of ascorbic acid in squashes, volum., 6F29
of caffeine in, gel chrom., 4F27
liquid chrom. - u.v. spectroph., 3F26
of caffeine in kola-type, by t.l.c. - densitom., 5F46
losses of ascorbic acid and SO_2 during storage of Ribena, 1F25
Biacetyl, detmn. in brewing materials, review of automated and semi-automated methods for, 4F28
Bicyclo[2.2.1]hept-5-ene-2,3-dicarboxamide, *NNN'N'*-tetraethyl-, see *Endomide*
Bile, detmn. of dichlorodifluoro- and trichloro-fluoro-methane in, by g.l.c., 1D37
of dicoumarol metabolites in, paper-electroph. sepn. method for, 2D45
Bile acids, sepn. of free from conjugated, by t.l.c., 2D84
t.l.c. study of, 6D53
Bilirubin, detmn. in blood or blood plasma, errors attributable to sample storage in, 1D2
in blood serum, correction for turbidity in, 1D1
spectroph., 6D68
of conjugated and unconjugated, in liver tissue, spectroph., 2D132
Biliverdins, sepn. and identn. of isomeric deutero- and meso-, 1D85
Binaphthyldicarboxylic acids, detmn. of naphthostyril and its halogen deriv. in, polarogr., 1C52
Bio-assay, report of conference on, 1A1
Biochanin, sepn. from other oestrogens, gel chrom. - paper chrom., 4D48
Biochemical analysis, see also *Clinical analysis*
applications of n.m.r. in, 6D71*B*
with membrane-electrode probes, 2A1*C*
Biochemical oxygen demand, of industrial wastes, detmn., sample preservation for, 3H45
Bioethanomethrin, detmn., by saponification - g.l.c., 2G38
Biological fluids, detmn. of acetate in, by g.l.c., 4D38
of 1,4-benzodiazepine deriv. in, differential pulse polarogr., 2A1*C*
of Br, Au and I in, X-ray emission spectrom., 6D7
of Cd, Pb and Hg in, inter-comparison programme on, 5A3*C*
of cloxazolam and its metabolites in, spectroph., 3E38
of diphenhydramine in, u.v. spectroph., 3D43
of drugs in, by m.s., 6D26
of drugs and their metabolites in, use of ion-pair extraction in, review, 2D25
of ethchlorvynol in, by h.p.l.c., 4D17
of formate in, enzymic - fluorim., 3D63
of glucose in, spectroph., prevention of interference in *o*-toluidine method for, 3D56
of perfluoro-compounds in, by g.l.c., 2D49
of phencyclidine and its metabolites in, by g.l.c. - m.s., 4D21
of volatile compounds in, by g.l.c., 2D61
of Zn in, by a.a.s., 3D13
extraction of lipophilic drugs from, with low-density org. solvents, 6D15
Biological materials, analysis, interference by plast
ciser contamination of solvents in, 2D1
standard buffer soln. for use in, 3D4
analysis and detmn. of ether lipids in, by t.l.c. an
g.l.c., 5D52
detection of pollutants in, by X-ray fluorescenc
5A3*C*
of synthetic psychotropic drugs in, thin-laye
electroph., 1D21
detection and detmn. of *N*-nitroso-compounds i
with use of thermal-energy analyser, 2F12, 2F1
detmn. of ATP in, by bio-luminescence metho
5D87
of 5-allyl-5-isobutylbarbituric acid in, by g.l.c
2D29
of amidopyrine in, by g.l.c., 2D29
of As in, review, 3D18
of Cd in, by a.a.s., 5D9
comparison of methods for, 5A3*C*
of caffeine in, by g.l.c., 2D29
of Ca in, by n.a.a. - Cerenkov counting, 2D7
of Cr in, by n.a.a., 5A5*C*
of Cu in, by activation analysis, 6A3*C*
of 2,6-diaminopimelic acid in, ion-exchang
chrom. - spectroph., 1D71
of elements in, by a.a.s., 3J59, 5A5*C*, 5H22
review, 3D8
review of atomisation techniques in, 5J49
by n.a.a., 4D5, 5A5*C*
sepn. scheme for, 6D5
standards for, 3D6
with use of computer, 4A19
wet-ashing in microwave oven for, 3D5
with laser micro-probe, 2J112
of F in, by O-bomb combustion - potentiom
with ion-sensitive electrode, 5D12
of I in, by n.a.a., 6D14
of Mg in, by n.a.a. - Cerenkov counting, 2D7
of Hg in, by activation analysis, 6A3*C*
by n.a.a., with use of multi-element standard
2B53
standards for, 1D11
of Ni in, by n.a.a. - Cerenkov counting, 2D7
of ^{15}N in, by m.s. or emission spectrom., review
3D16
of Os in, by n.a.a., 4B111
of PAP and PAPS in, by bio-luminescenc
method, 3D112
of pesticides in, sampling and extractio
methods for, 3G28
of phthalic acid esters in open-ocean sample
by g.l.c., 6D35
of Pt in, by n.a.a., spontaneous sepn. procedur
for, 5A5*C*
of Pu in, by electro-deposition, 3D15
review, and method for, 6H35
of protein-bound trace elements in, gel chrom.
n.a.a., 3D11
of ^{226}Ra in, emanation apparatus for, 2H25
of Ru in, by n.a.a., 4B111
of Se in, by n.a.a., 4B111
fluorim., 5F9
X-ray emission spectrom., 6D13
of Si in, by n.a.a. - Cerenkov counting, 2D7
of Ag in, emission spectrom., 2D9
of Na fluoroacetate in, by g.l.c. of fluoroaceta
ester, 2D48
of Te in, by n.a.a., 3D22
of U in, by n.a.a., 3D22
photom., 3H21
extraction of drugs and their metabolites fro
with use of Amberlite XAD-2 resin, 1D18
Biological tissues, see also *Plants*; and under nam
of specific tissues

logical tissues—*continued*
nalysis of ethanolamine- and serine-containing phospholipids of, by h.p.l.c. of biphenyl-4-carbonyl deriv., 1D51
of lipids of, by t.l.c. - g.l.c. of esters, 1D49
of metabolites in, by isotachophoresis, 5D88
ssay of disaccharidases in, automated, 5D102
etection of antithyroid drug residues in, by t.l.c., 1F13
etmn. of acetate in, by g.l.c., as benzyl acetate, 3D64
of *S*-adenosyl-homocysteine and -methionine in, liquid chrom., 5D71
of Am and Pu in small animal carcases, 2A7*C*
of ^{241}Am and ^{239}Pu in bovine, 1A1*C*
of atenolol in homogenates of, by g.l.c. of heptafluorobutyryl deriv., 1D26
of Cd in, by a.a.s., 6D10
of Cd and Cu in, by a.a.s., extraction method for, 3D14
of Cd and Pb in, 2A1*C*
of chloroquine in, by g.l.c., 4D29
of cholesterol in, spectroph., non-extraction procedure for, 5D55
of Co and Ni in, by a.a.s., extraction method for, 3D27
of [^{32}P]cAMP and [^{32}P]cGMP in, scheme for, 3D111
of diazinon in, by micro sublimation - u.v. spectroph., 6D36
of dichlorodifluoro- and trichlorofluoro-methane in, by g.l.c., 1D37
of elements in, X-ray spectrom., 3D7
of elements in digests of, by a.a.s., 6J55
of F in, by O-bomb combustion - potentiom., with ion-sensitive electrode, 5D12
of Ga in, anodic-stripping voltamm., 2D11
of glycogen in, enzymic, destruction of pre-existing glucose for, 4D36
of β-guanidinopropionate and its phosphorylated deriv. in, colorim., 4D53
of ^{3}H in, by O-flask combustion - liquid scintillation counting, 2D142
of 5-hydroxyindol-3-ylacetic acid and 5-hydroxytryptamine in, fluorim., 3D88
of ^{129}I in, by n.a.a., 3D24
of naphthalene and alkylnaphthalene deriv. in, u.v. spectroph., 2D55
of org. compounds in, by g.c., pre-concn. method for, 5H33
of organophosphorus pesticides in, by g.l.c. or t.l.c., 1G19
of Pd and Pt in, by a.a.s., 5D15
of perfluoro-compounds in, by g.l.c., 2D49
of 5-phosphoribosyl 1-pyrophosphate in, radiom., 5D37
of Pu in, by fission-track counting, 1A1*C*
of polycyclic hydrocarbons in marine, 5A1*C*
of reduced glutathione in, enzymic - spectroph., 5F73
of Se in, by g.l.c., 2F5
of Ag in, by a.a.s., 2D8
of spermidine and spermine in, by t.l.c. - fluorim., 2D87
of sulphamethazine in, by h.p.l.c., 5D32
of thiamine in, fluorim., 4D69
identn. of prostaglandins in, by t.l.c. - colorim., 4D39
identn. and detmn. of cholanoic acids in, by t.l.c. - g.l.c. (or g.l.c. - m.s.) of trifluoroacetyl deriv. of methyl esters, 1D59
n.a.a. study of interaction between surgical implants and, 5A5*C*

Biological tissues—*continued*
sepn. of glycolipids of, by t.l.c., 3D74
of nucleotides of, ion-exchange chrom., 5A2*C*
Biotin, sepn. from other vitamin B compounds, by t.l.c., 2E22
Biphenyl, computerised calculation of number of possible Cl-substitution products of, 2A20
detmn. in citrus fruits, liquid chrom. - g.l.c., 3F20
spectroph., 1G15
in citrus-fruit products, by h.p.l.c., 4F25
of primary aromatic amines in, by t.l.c., 2F34
Biphenyl derivatives, polybromo-, detmn. in dairy products, gel chrom. - g.l.c. or by t.l.c., 4F24
in dairy products or feeding-stuffs, by u.v. irradiation - g.l.c., 5G19
in feeding-stuffs, liquid chrom. - g.l.c., 5G18
—, **polychloro-,** analysis of urinary metabolites of, by m.s., 4D32
detection of chlorodibenzofurans in, liquid chrom. - g.l.c. - m.s., 3C92
detmn. in air, by g.l.c., 6H20
in water, by g.c., 4H33
of homologues and isomers of, by g.l.c. or t.l.c., 2D53
identn., interrupted-sweep voltamm., instrument for, 1H20
of chlorinated dibenzofurans in, by g.l.c., 6C99
recovery from water or sediments, 2A4*C*
sepn., by t.l.c., 1J18
2-Biphenylamine, detmn. of 4-biphenylamine in, by t.l.c. - fluorim., 6C48
4-Biphenylamine, detmn. in 2-biphenylamine, by t.l.c. - fluorim., 6C48
Biphenyl-4-ol, detmn., non-aq. conductim., 4C2
Biscuits, detmn. of protein in, volum., 6F12
Bismuth, concn., with use of three-phase extraction system, 1B11
detection, colour reaction for, 5B106
detmn., anodic-stripping voltamm., 2B13
effect of Hg concn. in, 6B15
by a.a.s., 2J86
by automated Schmidt technique, 3B16
extraction method for, 3B11
with use of micro-probe - flame - adapter atomiser, 3B7
by luminescence method, 2B101
complexom., 4B10
indicator for, 6B60
photom., 4B95
potentiom., 4B8, 5B23
spectroph., 2B102, 4B94, 4B96, 5B189
stripping chronopotentiom., 5B11
X-ray emission spectrom., 5B149
diluent effects in, 1B14
in air-borne dust, emission spectrom., 4H4
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by a.a.s., 3D8
in boric acid, by electrolysis - spectrogr., 5B85
in boron nitride, spectrogr., 5B86
in cadmium, spectroph., 1B48
in cadmium sulphide, anodic-stripping voltamm., 4B36
in copper, by a.a.s., 2B32
in ion-exchange resins, by a.a.s., 5B142
in lead - zirconium titanate ceramics, polarogr., 6B237
in minerals, ores or rocks, spectroph., 4B19
in mussels, by m.s., 4F1
in nickel alloys, ion-exchange chrom. - a.a.s., 6B218
in presence of Sb and As, polarogr., 1B104
of Sb, Pb and Te, by luminescence method, 2B18

Bismuth, determination in presence—*continued*
of As, automated potentiom., 2B97
of Cu, polarogr., 6B14
of Pb and Sn, oscillopolarogr., 2B83
of Hg, spectroph., 3B57
of Mo, biamperom., 5B167
of other elements, by t.l.c. - colorim., 2B15
of Ti, potentiom., 2B100
in silver, stripping voltamm., 6B43
in steel, by a.a.s., 3B154
in tin, spectroph., 2B103
in vanadium, spectrogr., 6B155
in water, 6H29
by electro-deposition - spectrogr., 2H20
in zinc sulphide, anodic-stripping voltamm., 4B36
of Ag in, spectroph., 3B45
paper-chrom. study of, in butanol - HCl media, 6B30
sepn. from Cd, Cr, Co, Fe, Ni, Ag or U, paper electroph., 3B5
from Co, Cu, Mo and Ni, or from Pb and Zn, by t.l.c., 5B4
from Fe, Pb, Mn and Zn, by ion exchange, 1B2
from other elements, by g.s.c., 3B83
by solvent extraction, 2B103
from Pt, electroph., 1B167
from Ag, paper electroph., 3B5
solvent extraction of, with metal dithiocarbamates, 5B1
with org. bases from SCN^- soln., 4B97
with quaternary ammonium nitrates, 6B1
Bismuth, reagents for, 2,2′-bipyridyl - I^-, 5B189
catechol violet - diphenylguanidine, 4B94
5-dimethylamino-2-(2-thiazolylazo)phenol, 4B96
dithizone, 2B15
2-mercaptobenzimidazole, 3B57
papaverine, 4B95
KI, 2B103
2,2′-[pyridine-2,6-diylbis(methylidynenitrilo)]-diphenol, 5B106
Se analogues of azolidines, 5B2
Bismuth alloys, detmn. of Cd in, spectroph., 2B49
of Ge in, coulom., 5B122
Bismuth complex, with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
Bismuth ores, detmn. of Bi, Ni, Pd, Pt and Te in, spectroph., 4B19
Bismuth oxide, detmn. of Ag in, spectroph., 3B45
Bismuth salts, detmn. of Pb in, fluorim., 5B74
Bisulphite, see *Hydrogen sulphite ion*
Bitumen, detmn. in tar - bitumen blends, gel chrom. - gravim., 4C56
of Ti in, photom., 1B92
Biuret, detection, by t.l.c., 2C24
detmn. in urea, differential-scanning calorim. or by t.g.a., 3G14
Blackcurrant juice, detmn. of isocitric acid in, enzymic, removal of interfering substances in, 4F20
Blood, analysis, errors attributable to sample storage in, 1D2
of lipids of, by t.l.c. - g.l.c. of esters, 1D49
assay of adenosine deaminase in cells of, radiom., 2D161
of cholinesterase in, by fluorim. titration, 3D126
concn. of faecal, 4A1*C*
detection of drugs in, by g.l.c., 1D17
detmn. of adenine in, by t.l.c., 2D44
of atenolol in, by g.l.c. of heptafluorobutyryl deriv., 1D26
of 1,4-benzodiazepine deriv. in, differential pulse polarogr., 5D22, 6D25
of bromazepam in, cathode-ray polarogr., 4D19

Blood, determination—*continued*
of Cd in, by a.a.s., 1D7, 4D14, 5A3*C*, 6D9
by paper disc - graphite furnace technique, 5A3*C*
of Ca in, double-membrane electrode for, 4A1*C*
of pCO_2 in, fluorim. probe for, 4J51
of $^{14}CO_2$ in, by liquid scintillation counting, 2D17
of carbonylhaemoglobin in, spectroph., 6D33, 6D34
of chloroquine in, by g.l.c., 4D29
of Cr in, by co-pptn. with $PbSO_4$ - reflectance spectroph., 2D22
of Co in, by a.a.s., 3D9
of Cu in, by a.a.s., 3D9, 4D14
of dichlorodifluoro- and trichlorofluoromethane in, by g.l.c., 1D37
of elements in, by a.a.s., with use of graphite-tube atomiser, 5D2
of ethanol in, by g.c. of head-space vapours, 3D51
enzymic - amperom., 2D47
of 4-ethylsulphonylnaphthalene-1-sulphonamide in, by g.l.c. of methyl deriv. or fluorim., 2D56
of flunitrazepam and its metabolites in, by t.l.c. - fluorim., 4D20
of formate in, enzymic - fluorim., 3D63
of glucose in, correlation of results with plasma values, 1D39
enzymic, comparison of end-point and reaction-rate methods for, 4A1*C*
of [^{14}C]glucose specific activity in, liquid chrom. - liquid scintillation counting - enzymic, 2D57
of guanosine in, by t.l.c., 2D44
of haemoglobin in, improved falling-drop method for, 4D63
of hydrochlorothiazide in, by g.l.c. of tetramethyl deriv., 3D47
of hydrochlorothiazide in cells of, by g.l.c. of tetramethyl deriv., 6D32
of lasalocid in, fluorim., 5D17
of Fe in, by a.a.s., 4D14
of Pb in, by a.a.s., 1D7, 2A7*C*, 4D4, 4D14, 5A3*C*
effect of sample preparation in, 2D19
sampling procedures for, 1D13
of Mg in, by a.a.s., 4D14
of Mn in, by a.a.s., 3D9, 4D14
of maprotiline in, by g.l.c. of heptafluorobutyryl deriv., 6D24
of Hg in, by a.f.s., 3B58
by n.a.a., with collection on copper wire, 1D10
of methaemoglobin in, by e.s.r., 5D80
of nitrazepam in, spectroph., 5E35
of org. compounds in, by g.c., pre-concn. method for, 5H33
of pO_2 in, fluorim. probe for, 4J51
of parathion and its metabolites in, polarogr., 5D35
of phencyclidine and its metabolites in, by g.l.c. - m.s., 4D21
of phenformin in, 4A2*C*
of phentermine in, by g.l.c., isolation on macroreticular resin for, 4D28
of P in, continuous-flow spectroph., 5G2
of plasma electrolytes in, by chemical sensing electrodes, 4A1*C*
ion-exchange chrom., 3A12
of polyamines in, liquid chrom., 2A1*C*
of K in fish-, flame emission spectroph., 4D8

Blood, determination—*continued*
of prostaglandin A_2 in, by h.p.l.c. - g.l.c. of trimethylsilyl deriv. of methyl ester - m.s., 2D71
of reduced glutathione in, enzymic - spectroph., 5D73
of retinol-related compounds in, spectroph., 4D68
of Ag in, emission spectrom., 2D9
of SF_6 in, by g.s.c., 1D33
of Na in fish-, flame emission spectroph., 4D8
of talinolol in, spectroph., 5D27
of triflubazam and its metabolites in, by h.p.l.c., 3D38
of urea in, enzyme electrode for, 5J96
of Zn in, by a.a.s., 4D14
extraction of drugs and their metabolites from, with use of Amberlite XAD-2 resin, 1D18
identn. and detmn. of (*S*)-3,4-dihydroxybutyrate in, by g.l.c. - m.s. of trimethylsilyl deriv., 2D64
sepn. of amino-acids from, filtration device for, 3D90
of androst-16-ene deriv. in, gel chrom., 3D80
of histidine and lysine from hydrolysates of, as 2-chloro-4-(4-hydroxyphenylazo)benzenesulphonates, 2D107

Blood plasma, analysis, errors attributable to sample storage in, 1D2
of lipids of, by t.l.c. - g.l.c. of esters, 1D49
of long-chain acids of phosphatidylcholines and cholesteryl esters of, by g.c., 6A1*C*
of volatile constituents of, by g.l.c. - m.s., 1D3
detection of clonazepam and its metabolites in, by t.l.c., 5D20
detmn. of acid mucopolysaccharides in free and conjugated form in, liquid chrom. - spectroph., 6D37
of adenine in, or in fractions of, by t.l.c., 2D44
of adrenaline in, by g.l.c., 1D25
of alphaxalone in, by t.l.c. - g.l.c. of trimethylsilyl deriv., 5D26
of amitriptyline in, by g.l.c. or u.v. spectroph., 2D36
of anti-epileptic drugs in, inter-laboratory study of, 6D20
of aspirin in, by g.l.c. of trimethylsilyl deriv., 1D23
of atenolol in, by g.l.c. of heptafluorobutyryl deriv., 1D26
of 1,4-benzodiazepine deriv. in, differential pulse polarogr., 5D22
of 3-[2-(benzylmethylamino)ethoxycarbonyl]-1,4-dihydro-5-methoxycarbonyl-4-(3-nitrophenyl)-2,6-lutidine hydrochloride in, by oxidation - g.l.c., 3D42
of 1,2-bis-(3,5-dioxopiperazinyl)propane in, by g.l.c. - m.s., 1D29
of bromazepam in, by g.l.c. of hydrolysis product, 2D32
of Ca in, double-membrane electrode for, 4A1*C*
of cardioactive drugs in, 4A1*C*
of 7-chloro-5,11-dihydrodibenz[*b*,*e*][1,4]oxazepine-5-carboxamide, in, by g.l.c. of corresponding nitrile, 3D37
of clorazepate potassium in, by g.l.c., 5D23
of cocaine in, by g.l.c. of pentafluoropropionyl deriv. of reduction product, 3D30
of dehydroepiandrosterone in, by g.l.c., 5D58
of desipramine in, by g.l.c. - m.s. of *N*-acetyl deriv., 4D25
of dextropropoxyphene in, by g.c., 4A1*C*
of diclofenac in, by g.l.c., as corresponding indolone, 4D27
of ergotaminine in, by h.p.l.c. - fluorim., 6J52

Blood plasma, determination—*continued*
of feprazone in, by g.l.c., 5D21
of flavoxate and its metabolite in, by t.l.c. - spectroph., 5D29
of flunitrazepam and its metabolites in, by t.l.c. - fluorim., 4D20
of F^- in, potentiom., with ion-sensitive electrode, 2D24
of flurazepam and its metabolites in, by g.l.c., 2D31
of free fatty acids in, by g.c., 6A1*C*
by g.l.c., 4D37
spectroph., salting-out technique for, 3D61
of glucose in, correlation of results with whole-blood values, 1D39
of guanosine in, or in fractions of, by t.l.c., 2D44
of hydrochlorothiazide in, by g.l.c. of tetramethyl deriv., 3D47, 6D32
of 5-(4-hydroxyphenyl)-5-phenylhydantoin in, by g.l.c., 5D18
of imipramine in, by g.l.c. - m.s., 4D25
of indomethacin in, by h.p.l.c., 6D23
of Fe in, automated colorim., effect of desferrioxamine in, 3D25
of isoniazid in, spectroph., 4E40
of [^{14}C]lactate specific radioactivity in, by reverse isotope dilution, 3D65
of [1-^{14}C]lactose in, enzymic - scintillation counting, 4D35
of leptazol in, by g.l.c., 5D25
of maprotiline in, by g.l.c. of heptafluorobutyryl deriv., 6D24
of methadone in unlabelled and ^{2}H-labelled forms in, by m.s., 4D24
of methadyl acetate and its metabolites in, by g.l.c., 2D30
of 1-(2-methylaminopropyl)-2-phenyladamantane in, by g.l.c. of chlorodifluoroacetyl deriv., 6E30
of methylphenobarbitone in, by g.l.c. of *N*-butyl deriv., 3D34
of metronidazole in, by g.l.c. of trimethylsilyl deriv., 1D28
of nicotine in, by g.l.c., 3D32
of noradrenaline in, by g.l.c., 1D25
of nordextropropoxyphene in, by g.c., 4A1*C*
of oestriol in, fluorim., 6D48
of 17-oxosteroids in conjugated form in, by m.s., effect of ampicillin administration in, 6D50
of paracetamol in, in presence of barbiturates, by g.l.c. of *O*-benzoyl or trimethylsilyl deriv., 2D34
of pentaerythritol in, by h.p.l.c., 3D41
of perphenazine and its sulphoxide metabolite in, by g.l.c. of trimethylsilyl deriv., 2D35
of phenobarbitone in, by g.l.c. of *N*-butyl deriv., 3D34
of polyamines in, liquid chrom., 2A1*C*
of progesterone in, by t.l.c. - g.l.c., 3D81
of salicylamide in, by g.l.c. of trimethylsilyl deriv., 1D23
of salicylic acid in, by g.l.c. of trimethylsilyl deriv., 1D23
of salicylic acids and their metabolites in, fluorim., 1D24, 2D33
of Na valproate in, by methylation - g.l.c., 5D19
of sulphadiazine in, by t.l.c. - fluorim., 1D27
of sulthiame in, by methylation - g.l.c., 5D19
of thiazinamium methyl sulphate in, by g.l.c., 5D30
of timolol in, by g.l.c. of heptafluorobutyryl deriv., 5D28
of α-tocopherol in, by g.c., 6A1*C*

Blood plasma, determination—*continued*
of trazodone in, by g.c. - m.s., 6A1*C*
identn. of abnormal metabolites in, 5A2*C*
sepn. of corticosteroids of, automated gel chrom., 1D58
of oestrogens and phyto-oestrogens of, gel chrom. - paper chrom., 4D48
of steroids of, liquid chrom., 1D54
Blood serum, analysis, correction for interferences in Auto-Chemist method for, 1D1
interference in a.a.s. methods used in, 1J47
of guanidine deriv. in, automated ion-exchange chrom. - spectroph., 1D67
assay of alanine aminotransferase, aspartate aminotransferase and 2-hydroxybutyrate dehydrogenase in, fluorim., 2D149
of alkaline phosphatase in, by kinetic method, 2D157
of alkaline phosphatase isoenzymes in, by kinetic - spectroph. method, 4D76
of alkaline phosphatase and 5′-nucleotidase in, with use of enzyme inhibition by L-cysteine, 5D99
of aspartate aminotransferase isoenzymes in, by kinetic - u.v. spectroph. method, 2D150
of cholinesterase in, by fluorim. titration, 3D126
of creatine kinase in, by automated kinetic method, 2D154
of dopamine β-hydroxylase in, radiom., 2D148
of enzymes in, Scandinavian recommended methods for, 4A1*C*
of esterases in, gel electroph. - densitom., 1D97
of γ-glutamyltransferase in, substrate/product inhibition in, 4A1*C*
of γ-glutamyl transpeptidase in, problems arising in, 4D72
of α-hydrobutyrate, isocitrate, lactate and sorbitol dehydrogenases in, spectroph., 2D146
of isoenzymes in, avoidance of artefact in gel-electroph. sepn. in, 2D152
of lactate dehydrogenase in, amperom., 5D86
detmn. of acetate in, by g.l.c., as benzyl acetate, 3D64
of adrenaline in, by g.l.c., 1D25
of albumin in, by dye-binding method, 2D124
of amitriptyline in, by g.l.c. of trimethylsilyl deriv., 4D26
by oxidation - g.l.c., 3D40
of anti-epileptic drugs in, inter-laboratory study of, 6D20
of barbiturates in, by g.l.c., 6D19
of bilirubin in, spectroph., 6D68
of bupivacaine in, by m.s., 6D26
of Ca in, automated fluorim., 1D6
by a.a.s., 2D6
electrochem., 4A1*C*
potentiom., double-membrane electrode for, 4A1*C*
reference standards for, 3D12
with ion-sensitive electrodes, 5D8
of Ca in, and of Ca in 'ultra-filtrable' form in, automated volum., 6D8
of carbamazepine in, by t.l.c. - u.v. reflectance spectroph., 1D22
of carbohydrates in glycoproteins of, liquid chrom., 5A2*C*
of 7-chloro-5,11-dihydrodibenz[*b*,*e*][1,4]oxazepine-5-carboxamide in, by g.l.c. of corresponding nitrile, 3D37
of cholesterol in, automated, with use of Centrifichem system, 4D42
comparison of automated methods for, 2D78
comparison of methods for, 4A1*C*
enzymic - potentiom., automated, 4D43
Blood serum, determination of cholesterol—*continued*
enzymic - spectroph., with use of centrifugal analyser, 5D56
spectroph., 1D52
non-extraction procedure for, 5D55
of clomid isomers in, by g.l.c., 2E51
of cloxazolam and its metabolites in, spectroph., 3E38
of cobalamin in, by protein-binding method, 5D90
of Co in, by a.a.s., 3D9
of codeine in, by g.l.c., 6D16
of Cu in, by a.a.s., 3D9, 5D5, 6J54
of cyanocobalamin in, by protein-binding method, 5D91
of diclofenac in, by g.l.c., as corresponding indolone, 4D27
of disopyramide in, by g.l.c., 2D41
of drugs in, by e.s.r., 5A2*C*
of ethanol in, enzymic - amperom., 5D86
of ethosuximide in, by g.l.c. of *N*-butyl deriv., 3D35
of flucytosine in, by h.p.l.c., 3D48
of F in, by O-bomb combustion - potentiom., with ion-sensitive electrode, 5D12
of flurazepam and its metabolites in, by g.l.c., 2D31
of free fatty acids in, by automated Duncombe method, 3D60
by g.l.c., 6D40
by g.l.c. of methyl esters, 3D67
correction of systematic error in, 5D44
of frusemide in, by h.p.l.c., 3D48
of Fe in, automated colorim., effect of desferrioxamine in, 3D25
spectroph., 5D13, 5D14
of Fe-binding capacity of, spectroph., 5D13, 5D14
of isoniazid in, fluorim., 2D43
of ketoprofen in, by g.l.c. of methyl or trimethylsilyl ester, 2E37
of lactate in, amperom., enzyme electrode for, 5D45
of low-density lipoprotein apoproteins in, by Lowry spectroph. method, 6D66
of Mg in, by a.a.s., 2D6
of Mg in, and of Mg in 'ultra-filtrable' form in, automated volum., 6D8
of Mn in, by a.a.s., 3D9
of mercaptopurine in, by g.l.c., 4D30
of Hg in, automated spectroph., 3B56
of Hg in albumin-bound form in, gel electroph. - a.a.s., 2D10
of methadone in, by oxidation - g.l.c., 4D23
of methylphenobarbitone in, by g.l.c. of *N*-butyl deriv., 3D34
of 4-methylpyrazole in, by g.l.c. - m.s., 1D34
of nicotinamide and its 1-methyl deriv. in, fluorim., 4D70
of nitrazepam in, by g.l.c., as 2-amino-5-nitrobenzophenone, 4D18
of noradrenaline in, by g.l.c., 1D25
of norcodeine in, by g.l.c., 6D16
of phendimetrazine in, by g.l.c., 1D32
of phenobarbitone in, by g.l.c. of *N*-butyl deriv., 3D34
of PO_4^{3-} in, automated spectroph., 5D11
without deproteinisation, photom., 4A1*C*
of pinazepam and its metabolites in, by g.l.c. - m.s., 3D36
of K in, by a.a.s., 2D6
ion-exchange chrom., 5J17
potentiom., with ion-sensitive electrode, reference standards for, 3D12

lood serum, determination—*continued*
of quinidine in, by t.l.c. - fluorim., 4D15
of Na in, by a.a.s., 2D6
ion-exchange chrom., 5J17
of testosterone in, by g.l.c. - m.s., 1D57
of thyroxine in, by protein-binding method, 2D110
effect of fatty acids on results in, 6D65
of tranexamic acid in, by m.s. of *N*-hepta-fluorobutyryl deriv. of butyl ester, 2D46
of transferrin in, fluorim., 2D126
of triglycerides in, enzymic - volum., 2D77
of urea in, enzyme electrode for, 5J96
of Zn in, by a.a.s., 5H21, 6J54
identn. of campesterol, β-sitosterol and stigmasterol in, by g.l.c. - m.s. of trimethylsilyl deriv., 3D85
method for clearing lipaemic, 2D3
pharmacological significance of analyses of thyrostatic drugs, tri-iodothyronine and thyroxine in, 4A1*C*
sepn. of amino-acids from, filtration device for, 3D90
of lipoproteins of, gel electroph., comparison of methods for, 2D129
one tissue, detmn. of cAMP in, by protein-binding method, 1D86
of Pb in, 5A3*C*
report of symposium on methods for study of metabolism in, 4A1
orate, detmn., potentiom., enzyme electrode for, 3J84
oric acid, detmn. in water, spectroph., 3H20
of impurities in, by electrolysis - spectrogr., 5B85
extraction from aq. soln., partition chrom., 4B41
ornane derivatives, octachloro-, identn. in camphechlor, 5G32
ornyl acetate, identn. in valerian oil, 5E21
– isovalerate, identn. in valerian oil, 5E21
oron, concn., with use of three-phase extraction system, 1B11
detmn., with electron micro-probe, 2J66, 3B19
in fertilisers, by a.a.s., 4G5
in Fe - B - C alloys, spectrogr., 6B205
in iron ore, by n.a.a., 6B202
in plants, direct-reading emission spectrom., 2D5
spectrogr., 5D1
spectroph., 3G8
in reactor-moderator water, conductim., 3B27
in sea-water, automated spectroph., 4H22
in shellfish, spectroph., 6F3
in soil, spectroph., 3G8
in steel, automated spectroph., 1B147
by m.s., 4B144
by n.a.a., 6B202
emission spectrom., 4B145
in water, spectroph., 3H19
in zirconium(IV) oxide, spectrogr., 1B100
of Ca, Cl and Fe in, X-ray spectrom., 4B42
of C and O distribution in, by deuteron and proton activation, 2J156
of distribution of, in silicon, by n.a.a., 5A5*C*, 6B115
spectrogr., 6B116
oron, reagents for, azomethine H, 3G8
curcumin, 1B147, 4H22, 6F3
ferroin - salicylate, 3H19
oron carbide, detmn. of Al in, photom., 2B55
of impurities in, and in materials for production of, X-ray spectrom., 4B42
oron nitride, detmn. of impurities in, spectrogr., 5B86
Boron tribromide, g.l.c. study of, 1B5
Boron trichloride, g.l.c. study of, 1B5
Boron trifluoride, detmn., potentiom., in anhyd. HF media, 4B16
Brain tissue, analysis of amine metabolites in, by m.s. of pentafluoropropionyl deriv., 4D52
of volatile constituents of, by g.l.c., 3D2
detmn. of acetylcholine and choline in, by pyrolysis - g.l.c., 2D92
of Ca, Cu, Mg and Zn in, by a.a.s., 6D6
of desipramine in, radiom., 5D24
of (3,4-dihydroxyphenyl)acetic, 4-hydroxy-3-methoxyphenylacetic and 3-hydroxy-4-methoxyphenylacetic acids in, by g.l.c. of hexafluoroisopropyl esters of trifluoroacetyl deriv., 2D40
of indole deriv. in, by t.l.c. - densitom., 2D93
of pinazepam and its metabolites in, by g.l.c. - m.s., 3D36
of prostaglandins E_2 and $F_{2\alpha}$ in, by g.l.c. of trimethylsilyl deriv. of methyl esters - m.s., 2D72
extraction of drugs and their metabolites from, with use of Amberlite XAD-2 resin, 1D18
Bran, assay of glutathione dehydrogenase (ascorbate) in, spectroph., 1F9
detmn. of 1,2-dibromoethane in, volum., 5G38
Brass, detmn. of Cu and Fe in, spectroph., 5B51
of Cu and Ni in, gravim., 5B40
of elements in, X-ray emission spectrom., 6B35
of Pb in, by a.a.s., 3B6
of Sn in, spectroph., 1B32
method for dissolution of samples of, 1B1
Bread, detmn. of As in, by a.a.s., 3F5
of *N*-nitrosamines in, by g.c., 6F5
of protein in, volum., 6F12
Breath, analysis of aerosol particle size fractions in, X-ray emission spectrom., 5D3
detmn. of acetaldehyde, acetone, CO, ethanol and lower hydrocarbons in, by g.c., review, 3C50
of CO and H in, by g.s.c., 5D4
Brewing materials, analysis, report of convention on, 4A2
review of automated and semi-automated methods in, 4F28
Bricks, B.S.I. methods of test for insulating, 3B173
Brine, analysis, interference in a.a.s. methods used in, 1J47
detmn. of impurities in, by a.a.s., with electrolytic pre-concn., 6B8
Bromate, detmn., spectroph., 3B138
Bromazepam, detmn. in blood, cathode-ray polarogr., 4D19
differential pulse polarogr., 6D25
in blood plasma, by g.l.c. of hydrolysis product, 2D32
Bromfenvinfos, detmn. in plants or soil, by g.l.c., 6G11
sepn. from impurities and identn., by t.l.c., and detmn., by g.l.c. or i.r. spectroph., 6G10
Bromhexine, detmn. in pharmaceutical preparations, by g.l.c., 1E45
Bromide, detmn., argentim., improvement of end-point in, 3B133
indicator for, 3B132
by indirect a.a.s., 3B134
by kinetic - spectroph. method, 3B135
spectroph., 3B135
in mixed domestic - industrial waste effluents, iodim., 1H45
in phosphate rock, in presence of other halides, potentiom., with ion-sensitive electrode, 4B92
in presence of I^-, thermom., 5A6*C*

Bromide, determination—*continued*
in water, ion-exchange chrom. - coulom., 3H32
potentiom., with ion-sensitive electrode, 6H30
sepn. from Cl^- and I^-, ion-exchange chrom., 5J17
from other halides, gel chrom., 1B130
Bromine, detection in flame-resistant finishes for textiles, X-ray spectrom., 2C71
detmn., by a.a.s., 3B137
spectroph., 3B138
X-ray emission spectrom., with proton excitation, 1B6
in air-borne dust, by n.a.a., 2H5, 6H5
X-ray emission spectrom., 4H3
in alkali-metal or barium halides, by m.s., 3B29
in biol. fluids, X-ray emission spectrom., 6D7
in cadmium chalcogenides, coulo - bipotentiom., 1B50
in foods, review, 2F7
in org. compounds, see under *Organic elementary analysis*
in sediments, *in situ* X-ray emission spectrom., 6H25
in selenium, potentiom., 3B122
in urine, by n.a.a., 4D6
in water, 6H29
by n.a.a., 2H16
in wine, X-ray emission spectrom., 3D7
sepn. of ^{82}Br species of different oxidation states, chrom., 4B132
Bronze, detmn. of Be in, spectroph., 4B32
of Cu and Ni in, gravim., 5B40
of elements in plain or manganese, X-ray emission spectrom., 6B35
of Fe in, photom., 1B136
of Sn in, photom., 6B128
spectroph., 1B33
of Sn in 'tin-free', spectroph., 3B41
Brucine, comparison of reagents for pptn. of, 5E8
detmn. in crude drugs, by TAS technique, 2E8
Buckwheat, detmn. of organophosphorus pesticides in, comparison of extraction methods for, 5G34
Bullets, comparison of samples of lead, by n.a.a., 2A10
Bupivacaine, detmn. in blood serum, by m.s., 6D26
Butadiene, detection and detmn. of monomeric, in aq. polymer emulsions, by g.c., 3C75
detmn. in process streams, by g.c., 5C43
sepn. from other alkenes, by g.l.c., 6C16
Butane, B.S.I. specifications for commercial, 1C58
detmn. of ^3H-labelled, by radio - g.c., 6B19
sepn. from propene, by g.s.c., effect of sample size in, 2C12
—, **2,2-dimethyl-,** sepn. from its isomers, by g.c., 3J35
Butane derivatives, 2,3-halo-, sepn. of diastereoisomers of, by g.l.c., 6C41
Butane-1,4-diamine, sepn. from other amines, by t.l.c. of dansyl deriv., 3D86
Butane-2,3-diol, sepn. from other alcohols, by h.p.l.c., 2C14
Butanoate, phenyl-, ion-pair-chrom. study of, 6C47
Butan-1-ol, detmn., conductim., 5C4
g.l.c. study of, 6C1
identn. and detmn. in isobutyl alcohol, by g.l.c., 4C14
—, **2,2-bis(hydroxymethyl)-,** detmn. in presence of other polyols, by g.l.c., 3C74
—, **2-methyl-,** detmn. in beer, by g.l.c. of head-space vapours, 3F34
Butan-2-one, 3-hydroxy-, detmn. in brewing materials, review of automated and semi-automated methods for, 4F28
in wine, enzymic - spectroph., 3F38
But-1-ene, sepn. from other alkenes, by g.l.c., 6C16
technique for recording i.r. spectrum of adsorbed, 3J71
But-2-ene, analysis of products of reaction with ethylene of, by g.c., 6C14
sepn. of *cis-* and *trans-*, from other alkenes and from each other, by g.l.c., 6C16
technique for recording i.r. spectra of adsorbed *cis-* and *trans-*, 3J71
But-1-en-3-yne, detmn., by g.l.c., 2C56
identn. and detmn. in vinyl chloride, by g.l.c., 1C70
Butoxy-groups, detmn., volum., 3C6
Butter, characterisation of samples of, by g.l.c. analysis of constituent fatty acids - i.r. spectroph., 5F33
Buturon, identn. and detmn. in presence of other pesticides, by t.l.c., 2G35
s-Butyl alcohol, identn. and detmn. in isobutyl alcohol, by g.l.c., 4C14
t-Butyl alcohol, detmn. of ^3H-labelled, by radio - g.c., 6B19
identn. and detmn. in isobutyl or isopropyl alcohol, by g.l.c., 4C14
Butylamine, detection and detmn. of bound, in polyamide, German official method for, 4F11
detmn., colorim., 3C22
n.m.r. study of systems containing I and, 2A1*C*
Butylated hydroxyanisole, see *Phenol, t-butyl-4-methoxy-*
Butylated hydroxytoluene, see p-*Cresol, 2,6-di-t-butyl-*
But-1-yne, detmn., by g.l.c., 2C56
Butyraldehyde, identn. and detmn. in isobutyl alcohol, by g.l.c., 4C14
Butyramide, sepn. from related compounds, by g.c., 3C24
—, ***NN*-dimethyl-,** sepn. from related compounds, by g.c., 3C24
—, ***N*-methyl-,** sepn. from related compounds, by g.c., 3C24
Butyrate, (*S*)-3,4-dihydroxy-, identn. and detmn. in blood, foods or urine, by g.l.c. - m.s. of trimethylsilyl deriv., 2D64
Butyric acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
—, **4-amino-,** detmn., by g.l.c. of 1,1,1,3,3,3-hexafluoroisopropyl-*N*-trifluoroacetyl deriv., 3D98
—, **indol-3-yl-,** detmn. in potatoes, by t.l.c., 3G21
—, **phenyl-,** detmn., ion-pair partition chrom. - u.v. spectroph., 2C40
—, **2-phenyl-, α-methylbenzylamine salt,** sepn. of diastereoisomers of, by recrystallisation, 4C38
Butyrohydroxamic acid, as analytical reagent, 6A8

C

COD, see *Chemical oxygen demand*
Cabbage, detection of carbamate pesticides in, by t.l.c., clean-up method for, 6F24
detmn. of carbamate pesticides in, by g.l.c. of sulphonate deriv., 1G20
of *NN*-diethyl-2,6-dinitro-4-trifluoromethylaniline in, polarogr., 3H44
Cacao, particle size analysis and evaluation of, 5F19
Cacao butter, detection of shea-fat in, colour reaction for, 3F51
Cadaverine, detmn., potentiom., enzyme electrode for, 5J97
in urine, by t.l.c. of dansyl deriv., 3D86
Cadmium, concn., by co-pptn. on $MnO(OH)_2$, 4B15
liquid chrom., 2B14

Cadmium—*continued*
detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
detection and detmn., by t.l.c., 3B92
in solid samples, by a.a.s., 1C8
detmn., anodic-stripping voltamm., 2B50
at amalgamated copper rotating-disc electrode, 5B21
effect of Hg concn. in, 6B15
by a.a.s., 2J86
automated, 2J85
electrolytic pre-concn. method for, 6B8
extraction method for, 3B11
with use of micro-probe - flame - adapter atomiser, 3B7
with use of ultrasonic nebulisation, 3B13
by a.f.s., 2J83
by ion exchange - X-ray photo-electron spectrom., 5B15
by thermom. titration, 6B5
colorim. or spectroph., with use of reagent-impregnated polymer sheet, 3B12
complexom., comparison of titrants for, 4B10
indicators for, 1A6, 3B14, 6B4
coulom., 6C30
fluorim., 1B44
iodim., indirect, 2B11
photom., 1B46
polarogr., 1B47
potentiom., 4B8, 4B11, 5B14, 5B17
with silver - silver sulphide electrode, 1B10
reflectance spectroph., 5B70
spectrogr., 6B16
spectroph., 2B49, 3B14, 3B54, 5B69
stripping chronopotentiom., 5B11
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 1H3, 3H5, 3H6
in aluminium, by a.a.s., 1B56
concn. methods for, 4B46
in beryllium or beryllium alloys, polarogr., 6B57
in biol. fluids, inter-comparison programme on, 5A3*C*
in biol. materials, by a.a.s., 3D8, 5D9
by n.a.a., 4D5
comparison of methods for, 5A3*C*
in biol. materials in protein-bound form, by gel filtration - n.a.a., 3D11
in biol. tissues, 2A1*C*
by a.a.s., 6D10
extraction method for, 3D14
in blood, by a.a.s., 1D7, 4D14, 5A3*C*, 6D9
by paper disc - graphite furnace technique, 5A3*C*
in electroplating solutions, complexom., 5B77
in estuarine water, by ion exchange - a.a.s., 4H18
in fish tissues, by a.a.s., 3F3, 5F6
in foods, anodic-stripping voltamm., 2F1
by a.a.s., 4F3
comparison of methods for, 5A3*C*
inverse voltamm., 3F2
in germanium or germanium alloys, stripping voltamm., 6B126
in hair, by a.a.s., 6D4
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in milk, 5A5*C*
in minerals, ores or rocks, by a.a.s., 4B12
in nickel alloys, ion-exchange chrom. - a.a.s., 6B218

Cadmium, determination—*continued*
in organotin compounds, inverse voltamm., 4F12
in paints, by a.a.s., 1C77
in petroleum or petroleum products, by a.a.s., 3C43
in presence of Cu or In, polarogr., 6B14
of Cu or Pb, deriv. chronopotentiom., 5B76
of Te, stripping voltamm., 6B168
of Zn, by kinetic - spectroph. method, 3B53
in sediments, by a.a.s., 6H26
in situ X-ray emission spectrom., 6H25
in sewage or sewage effluent, anodic-stripping voltamm., 1H29
in soil, by a.a.s., comparison of extractants for, 3G6
in tin, by n.a.a., 5B124
in urine, by a.a.s., 6D9
in vegetables, oscillopolarogr., 6G1
in water, 6H29
anodic-stripping voltamm., 1H29, 2A4*C*, 3H17
automated, 2H22
by a.a.s., 2H18, 2H21, 5H21
collection in soya-bean curd for, 4H20
by ion exchange - a.a.s., 1H28
collection on chelating-agent-loaded resin for, 5H18
ion-exchange chrom. - a.a.s., 5H20
potentiom., with ion-sensitive electrode, 6H30
spectrogr., 1H24, 5H19
in zinc sulphide, anodic-stripping voltamm., 4B36
in zirconium(IV) oxide, spectrogr., 1B100
of impurities in, spectroph., 1B48
of Ag in, spectroph., 3B44, 3B45
paper-chrom. study of, in butanol - HCl media, 6B30
sepn. from Al, Ga, Au, In and Sc, by ion exchange, 1B2
from Bi, paper electroph., 3B5
from Ca and Hg, ion-exchange chrom., 2J17
from Co, Cu, In, Hg and Zn, by ion exchange, 1B2
from Co, Cu, Pb, Mn and Zn, ion-exchange chrom., 1B17
from Co, Cu, Pb, Ni and Zn, ion-exchange chrom., 1J11
from Cu, by solvent extraction, 6B29
with use of reagent-impregnated polyurethan foam, 4B27
from Hg, by ion exchange, 5B20
by solvent extraction, 5B83
from Hg and Ag, by solvent extraction, 2B37
from Hg and Zn, ion-exchange chrom., 2B5
from other elements, by g.s.c., 3B83
from Ti, chrom., 5B127
from V, ion-exchange chrom., 3B115
from Zn, extraction chrom., 6B64
solvent extraction of, with Aliquat 336-S, 5B73
with hexafluoroacetylacetone - dibutyl sulphoxide or tributyl phosphate, 2B47
with metal dithiocarbamates, 5B1
sorption of, on $Al(OH)_3$, $Fe(OH)_3$ and $La(OH)_3$, 2B16
Cadmium, organic compounds of, decomposition procedure for, 1C2
Cadmium, reagents for, 5-benzoxazol-2-yl-1,3-diphenylformazan, 3B54
crystal violet - I^- (or SCN^-), 5B70
3-diethylamino-2-[3-(1-methyl-2-piperidyl)-2-pyridylazo]phenol, 1B46
diphenylguanidine - xylenol orange, 2B49
4-ethyl-2-(2-thiazolylazo)phenol, 3B14

Cadmium, reagents for—*continued*
1,10-phenanthroline - Rose Bengal B, 5B69
1-(2-pyridylazo)-2-naphthol, 3B12
3-salicylidenedithiocarbazic acid methyl ester, 1B44
Se analogues of azolidines, 5B2
Cadmium alloys, detmn. of Cd in, spectroph., 2B49
of Ge in, coulom., 5B122
—, **Cd - Sn,** detmn. of elements in, anodic-stripping voltamm., comparison of electro-dissolution of galvanic and thermal alloys in, 3B55
Cadmium arsenide, detmn. of Li in lithium-drifted crystals of, anodic-stripping voltamm., 3B10
Cadmium complexes, with 2,2′-dichlorodithizone, 5A9
with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
with thiosemicarbazide, detmn., volum., 6A9
Cadmium salts, detmn. in aq. soln., by β-ray back-scattering, 5B18
of Pb in, fluorim., 5B74
of Th in, concn. by co-pptn. for, 1B69
Cadmium selenide, detmn. of Br in, coulo - bipotentiom., 1B50
of Cl^- in, amperom., 5B79
of Cu distribution in films of, by ion-beam etching - a.a.s., 1B49
Cadmium silicon arsenide, detmn. of Se in Se-drifted, stripping voltamm., 6B162
Cadmium sulphate, detmn. of impurities in, spectrogr., 5B78
Cadmium sulphide, detmn. of Sb, Bi, Cu and Pb in, anodic-stripping voltamm., 4B36
of Br in, coulo - bipotentiom., 1B50
Cadmium telluride, detmn. of Br in, coulo - bipotentiom., 1B50
Caesium, detmn. in minerals, ores or rocks, flame emission spectroph., 5B34
in plants, by n.a.a., 5G1
in urine, by n.a.a., 4D6
in water, by n.a.a., 2H16
sepn. from Ba and Mg or from K, paper chrom., 3B3
solvent extraction of, with nitrobenzene in presence of H_3AsO_4 - catechol complex, 6B27
with 1,3,13,15-tetra-t-butyldibenzo-18-crown-6, 6B22
Caesium chloromolybdate, detmn. of Mo^{III} in, amperom. or spectroph., 2B26
Caffeine, comparison of reagents for pptn. of, 5E8
detection, optimum concn. of Dragendorff reagent for, 3E11
detmn., by continuous-flow photochemical oxidation - spectroph., 1E3
by t.l.c. - u.v. reflectance spectroph., with use of Kubelka - Munk function, 5E13
in analgesic tablets, by g.l.c., 6E4
in aq. soln. containing Na benzoate, by partial extraction - refractom., 5C3
in beverages, gel chrom., 4F27
in beverages or foods, liquid chrom. - u.v. spectroph., 3F26
in biol. materials or pharmaceutical preparations, by g.l.c., 2D29
in kola-type drinks, by t.l.c. - densitom., 5F46
in presence of aspirin, codeine phosphate and phenacetin, by g.l.c., 5E12
of aspirin, paracetamol and phenacetin, by t.l.c., 4E27
of aspirin, paracetamol, phenacetin and salicylamide, by h.p.l.c., 1E27
identn., by t.l.c., 3E4
— **sodium benzoate,** detmn. in presence of aspirin and phenacetin (or codeine phosphate), complexom., 2E31
Calamine lotion, detmn. of phenol in phenolated, spectroph., 2E54
Calciferol, detmn., by h.p.l.c., anomalous effects in, 5J12
in pharmaceutical preparations, spectroph., 2E21
Calcite, detmn. in coal, by d.t.a., 4B170
in soil, deriv. thermogravim., 5A6*C*
Calcium, detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
detmn., by a.a.s., 2J86
optimisation of experimental factors for, 5J48
with use of ultrasonic nebulisation, 3B13
by ion exchange - X-ray photo-electron spectrom., 5B15
by thermom. titration, 6B5
colorim. or complexom., effect of presence of Na acetate and $NaClO_4$ in, 1B41
complexom., indicators for, 3B14, 6B60
coulom., 6C30
potentiom., ion-sensitive electrodes for, 1J70, 2J135, 5J88, 5J90, 5J91
spectroph., 2B43, 3B14, 5B61
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
in alkali calcium silicate glass, by thermom. titration, 4B171
in alkali-metal or barium halides, by m.s., 3B29
in AMS alloy, complexom., 1B18
in biol. materials, by a.a.s., 3D8
by n.a.a., 4D5
by n.a.a. - Cerenkov counting, 2D7
in blood, double-membrane electrode for, 4A1*C*
errors attributable to sample storage in, 1D2
in blood plasma, double-membrane electrode for, 4A1*C*
in blood serum, automated fluorim., 1D6
by a.a.s., 2D6
double-membrane electrode for, 4A1*C*
electrochem., 4A1*C*
potentiom., with ion-sensitive electrodes, 5D8
reference standards for, 3D12
in boric acid, by electrolysis - spectrogr., 5B85
in boron, X-ray spectrom., 4B42
in boron carbide, X-ray spectrom., 4B42
in boron nitride, spectrogr., 5B86
in brain tissue, by a.a.s., 6D6
in carbon, X-ray spectrom., 4B42
in cement raw-mix slurries, by n.a.a., system for, 2J151*P*
continuous radiom., 6B238
in copper ores, by n.a.a., 5B43
in dolomite, X-ray emission spectrom., 5B218
in feldspar, emission spectrom., with ion-beam excitation, 4J44
in ferrosilicon alloys, by a.a.s., 4B146
in hair, by a.a.s., 6D4
in hornblende, X-ray emission spectrom., 3J57
in inclusions in iron, by electrolysis - spectrogr., 5B191
in iron ore, X-ray emission spectrom., 6B208
in lead oxalate, by a.a.s., 2C21
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in magnesite, spectrogr., 5B63
X-ray emission spectrom., 5B218
in multi-electrolyte infusion fluids, complexom., 4E1
in petroleum or petroleum products, flame emission spectroph., 6C65
in plants, direct-reading emission spectrom., 2D5

Calcium, determination in plants—*continued*
standards for, 2D4
in refractory materials, flame spectrom., 1B178
in sea-water, potentiom., evaluation of electrodes for, 6H48
in sediments, by a.a.s., 6H26
in silicates, with electron micro-probe, 4B66
in slag, X-ray emission spectrom., 6B208
in sodium, by a.a.s., 5B31
in soil, by a.a.s., comparison of extractants for, 3G6
in steel, by electrolysis - flame photom., 2B140
spectrogr., 1B146
in strontium compounds, 6B61
in tin, spectrogr., 6B131
in urine, by n.a.a., 4D6
in vanadium, spectrogr., 6B155
in water, 6H29
automated amperom., 6H33
by n.a.a., 2H16
X-ray fluorescence spectrom., concn. methods for, 2H19
of ^{43}Ca and ^{48}Ca, by n.a.a., 6B62
of 'ultra-filtrable' and total, in blood serum, automated volum., 6D8
sepn. from Cd and Hg, or from Sr, ion-exchange chrom., 2J17
from Fe, by t.l.c., 2B136
from other elements, ion-exchange chrom., 6B63
from Sr, paper chrom., 3B3
from V, ion-exchange chrom., 3B115
Calcium, reagents for, 2,7-bisazo-deriv. of chromotropic acid, 5B61
EGTA, 1D6
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
metalphthalein, 1B41
murexide, 1B41
Se analogues of azolidines, 5B2
2′,3′,4′-trihydroxyacetophenone, 2B43
Calcium carbonate, detmn. of U in, by n.a.a., 1B75
identn. in illicit tablets, i.r. spectroph., 4E7
Calcium chloride, detmn., potentiom., 2B7
in aq. soln. containing other chlorides, by capillary-tube sepn. in electric field, 6B3
Calcium fluoride, detmn. of rare-earth metals in, spectrogr., 6B59
Calcium sulphate, detmn. of dihydrate of, in hemihydrate, by d.t.a., 5A6*C*
Californium, solvent extraction of, from HNO_3 soln. with alkylene and vinylene deriv. of phosphine oxide, 1B79, 6B106
Calorimetry, applications of stopped-flow micro-, in study of enzyme reactions, 2A1*C*
biochem. and biol. studies by batch-type micro-, 2A1*C*
instrumentation and applications of titration methods for, 2A1*C*
—, **differential-scanning,** automated apparatus for, for purity studies, 2J160
Campesterol, identn. in blood serum, by g.l.c. - m.s. of trimethylsilyl deriv., 3D85
Camphechlor, sepn. and identn. of constituents of, 5G32
liquid chrom. - g.l.c., 6G9
Camphene, computerised calculation of number of possible Cl-substitution products of, 2A20
identn. in valerian oil, 5E21
Cannabichromene, differentiation from other cannabinoids, by g.l.c. of methyl ethers, 5E17
Cannabidiol, differentiation from other cannabinoids, by g.l.c. of methyl ethers, 5E17
g.l.c. - m.s. study of trimethylsilyl deriv. of pyrolysis products of, 1E9
Cannabinoids, detmn. in cannabis, by g.l.c., 2E14
in plants, by g.l.c., on-column silylation method for, 6E10
sepn. and characterisation of mono- and dihydroxy-, in *Cannabis sativa* flowering tops, by g.l.c. of trialkylsilyl deriv., 2E15
Cannabis sativa, detmn. of cannabinoids in, by g.l.c., 2E14
sepn. and characterisation of mono- and dihydroxycannabinoids in flowering tops of, by g.l.c. of trialkylsilyl deriv., 2E15
Cannabivarin, differentiation from other cannabinoids, by g.l.c. of methyl ethers, 5E17
ε-Caprolactam, detmn. in products of condensation of resorcinol with *N*-hydroxymethylcaprolactam, by t.l.c., 4C73
in trichloroethylene soln., by g.l.c., 4C72
Capsaicin, detmn. in ground paprika, by t.l.c., 5F38
Captafol, detmn. in fruit or vegetables, by g.l.c., 2G30
Captan, detmn. in fruit or vegetables, by g.l.c., 2G30
Caramel, detmn. of 4-methylimidazole in, by g.l.c. of acetyl deriv., 6F22
Carbachol, detmn. in eye-drops, spectroph., 6E27
Carbamazepine, detmn. in blood plasma or blood serum, inter-laboratory study of, 6D20
in blood serum, by t.l.c. - u.v. reflectance spectroph., 1D22
Carbamic acid, benzimidazol-2-yl-, methyl ester, detmn. in Uzgen preparations, by t.l.c. - u.v. spectroph., 3G27
sepn. from 2-aminobenzimidazole, benomyl, diethirimol and ethirimol, by t.l.c., 3G26
—, **diethyldithio-, salts,** detmn., non-aq. volum., 1C28
—, **dithio-, derivatives,** solvent extraction of, 2A13
—, **ethylenebisdithio-, manganese salt,** detmn. in formulations or cereals, spectroph., 5G30
—, **methyl-, esters, 2-s-butylphenyl,** detection in foods, by t.l.c., clean-up method for, 6F24
—, —, —, **3,4-xylyl,** detection in foods, by t.l.c., clean-up method for, 6F24
Carbanilide, *NN*-diethyl-, detmn. in propellents, with its partial nitration products, by h.p.l.c., 4C96
Carbaryl, detection in foods, by t.l.c., clean-up method for, 6F24
detection and detmn. in fruit or vegetables, by t.l.c. and g.l.c., 4G37
detmn., by g.l.c. of sulphonate deriv., 1G20
in foods or plants, improved clean-up procedure for, 4G37
in presence of other carbamate pesticides, by t.l.c. - enzymic, 2G34
identn. and detmn. in presence of other pesticides, by t.l.c., 2G35
Carbazole, detmn. of anthracene in, u.v. spectroph., 3C39
Carbides, detmn. of elements in, with electron micro-probe, 3B89
Carbofuran, detmn., by g.l.c. of sulphonate deriv., 1G20
Carbohydrases, see under *Enzymes, specific*
Carbohydrates, see also under headings such as *Amino-sugars*; *Monosaccharides*; etc.
detection of oligosaccharides in urine, by t.l.c., 2D58
detmn., spectroph., 4D33
in brewing materials, 4A3*C*
review of automated and semi-automated methods for, 4F28
of aldehydes in oxidation products of, liquid chrom. - spectroph., 2C16

Carbohydrates, determination—*continued*
of amino-sugars and neutral sugars in glycoproteins, ion-exchange chrom. of borate complexes - colorim., 2D130
of degree of polymerisation of oligo- and polysaccharides, by g.l.c., 1C24
of formic acid liberated by periodate oxidation of, by n.m.r., 2C16
of Pb in saccharides, 6F4
of neutral, in serum glycoproteins, liquid chrom., 5A2*C*
of IO_4^- consumption of, potentiom., with I^--sensitive electrode, 2C16
spectroph., 4C16
of starch and of sol., in plants, spectroph., 4D34
of total sugars in cereals or legumes, by anthrone method, calculation of results in, 5F15
identn. and detmn. of sugars in fruit, by g.l.c. of trimethylsilyl deriv. or by t.l.c., 2F30
paper-chrom. study of, 6D2
report of proceedings of International Commission for Uniform Methods of Sugar Analysis, 2F51*B*
sepn., by g.c., derivatisation for, review, 5J27
of beer or wort, partition chrom., 5F47
of neutral low-mol.-wt., by h.p.l.c., 3C12
of oligosaccharides, partition chrom. - automated colorim., 4H45
sepn. and detmn., by g.l.c. of trimethylsilyl deriv. of oximes, 5F16
sepn. and identn., by g.l.c. - m.s. of butaneboronate deriv., 6C20

Carbon, see also *Diamond*; *Graphite*
detmn., by g.c., amplification reaction for, 5B114
with electron micro-probe, 2J66, 3B19
in chromium, by photon activation, 3B127
in iron, emission spectrom., 4B145
in metals or alloys, by high-temp. oxidation, 5B113
in nickel, by γ-activation, 6B216
in niobium films, by ^{6}Li activation, 5B154
in org. compounds, see under *Organic elementary analysis*
in steel, emission spectrom., 2B142, 4B145
X-ray emission spectrom., detection limits in, 5B195
in tin, by combustion - g.c., with use of heating by magnetic field, 5B152
in tungsten, by combustion - g.s.c., 2B124
in vanadium, by combustion - g.c., with use of heating by magnetic field, 5B152
of Ca, Fe, Mn, Ni and S in, X-ray spectrom., 4B42
of ^{14}C in presence of ^{32}P, by liquid scintillation counting, 4D9
in reactor stack gas, 1A1*C*
of C-to-H ratio in gasoline, by n.m.r., 6C61
of distribution of, in boron, by deuteron activation, 2J156
in chromium, by laser sampling - m.s., 5B8
in steel, by proton activation, 2B143
of inorg., in sea-water, 2A4*C*
of org., in air-borne dust, solvents for extraction in, 1H15
in sediments, by combustion - thermal-conductim., 4H29
in water, by oxidation - i.r. spectroph., 6H42
by oxidation - thermal-conductim., 1H46
with use of pCO_2 electrode, 1H36
electron micro-probe analysis of samples covered with thin metal film, 1B81
radiobio-assay and environmental monitoring for ^{14}C, 1A1*C*
sepn. and identn. of polycyclic hydrocarbons adsorbed on blacks, scheme for, 1H21

Carbon dioxide, detmn. in air, i.r. spectroph., selection of resonant frequencies for, 6H6
in $Al(OH)_3$ gels, by g.c., 2E53
in beverages, conductim., 5F53
in blood or blood plasma, errors attributable to sample storage in, 1D2
in brewing materials, review of automated and semi-automated methods for, 4F28
in coal or minerals, gravim., 4B169
in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in power-station water, with use of gas-sensing membrane electrodes, 1H32
in tobacco smoke, by g.s.c., 2D15
in water, by g.c., 5H23
by pH-change method, 2H28
of ^{14}C-labelled, in blood, by liquid scintillation counting, 2D17
in respiration gases of plants, comparison of methods for, 2D16
of pCO_2 in fluids or gases, fluorim. probe for, 4J51
of H in, by g.s.c., 1B20

Carbon disulphide, detmn., volum., 1C13, 2B73
in air, by a.a.s. or potentiom., 1H7
g.l.c. study of, 3C26

Carbon monoxide, detmn. in air, by g.c., review, 3D50
by kinetic - spectroph. method, 4H6
colorim., 4H7
continuous coulom., 4H8
i.r. spectroph., selection of resonant frequencies for, 6H6
review, 3H1
spectroph., permeation apparatus for, 2H8
in environmental materials, by g.c., review, 2H1
in exhaled air, by g.s.c., 5D4
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in stack gases, with in-stack dispersive spectrometer, 5H3
in tobacco smoke, by g.s.c., 2D15
of H in, by g.s.c., 1B20

Carbon tetrachloride, detmn., by KOH decomposition - potentiom., 2E56
in biol. materials or water, by g.c., pre-concn. method for, 5H33

Carbon tetrafluoride, detmn. in sulphur hexafluoride, B.S.I. method for, 3B120

Carbonates, see also *Minerals, ores and rocks, carbonate*
in industrial wastes, as CO_2, thermal conductim., 1H44
in sodium sulphide, spectroph., 6B24
in water, by pH-change method, 2H28
of ^{14}C-labelled, in aq. soln., by liquid scintillation counting, losses arising in, 5H28
sepn. from Cl^- and SO_4^{2-}, ion-exchange chrom., 5J17

Carbonyl chloride, see *Phosgene*

Carbonyl compounds, see also *Aldehydes*; *Ketones*
detmn. in beer, flash exchange chrom., 1F17
sepn. and identn., by g.l.c. of 2,4-dinitrophenylhydrazones, 2C17

Carbonyl groups, detmn. in methacrylate copolymers, i.r. spectroph., 3C77

Carbonyl sulphide, detmn. in kraft furnace stack gases, by g.l.c., 5H8
g.c. sensitivity coeff. of, 5B157
g.l.c. study of, 3C26

rbonyl sulphide—*continued*
not formed as artefact during incubation of beer, 3F29
rboxin, detmn. in cereals, by t.l.c. - spectroph., 4G25
sepn. from other fungicides, paper chrom., 3G25
rboxylic acids, for higher members of the series see *Fatty acids*
detmn., by a.t.r. i.r. spectroph., 5C13
by g.l.c., deriv.-forming reagent for, 6D38
esterification procedure for, 2C19
conductim., in 2-methoxyethanol media, 4C2
volum., in dimethylformamide medium, 5C30
in alkyd resins, 4C86
in aq. soln., by g.l.c., extraction conditions for, 4C20
in pectin, by colloid titration, 6F9
of mono-, conductim., 5C4
identn., multiple-internal-reflection i.r. spectroph., 5C12
identn. and detmn. in lipids, alkyd paint resins, polyester resins or ester plasticisers, by g.l.c., preparation of methyl esters for, 3F49
in urine, comparison of isolation methods for, 3D62
sepn., by g.c., derivatisation for, review, 5J27
sepn. and detmn., liquid chrom. of phenacyl esters - u.v. spectroph., 4C22
of volatile, by steam-distillation - g.l.c., 1D43
- anhydrides, detmn., conductim., 5C4
volum., indicator for use in morpholine method for, 6C26
- esters, g.l.c. study of unsaturated, 3C19
rboxylic acids, aliphatic, sepn. and detmn., by g.l.c., as acylated α-hydroxyalkylphosphonate esters, 3C16
-, aromatic, detmn., potentiom., in 3-methyl-oxazolidin-2-one media, 2C31
spectroph., 2C41
-, —, esters, sepn., by g.c., 3J34
-, C_2 to C_6, analysis of free, review, 4C19
detmn. of monobasic, in air, by g.c., 5H15
-, C_{17}, g.l.c. and g.l.c. - m.s. studies of methyl esters and trimethylsilyl deriv. of isomeric mono-, and of their 2-hydroxy-deriv., 3D68
-, citric-acid-cycle, sepn., liquid chrom., 1D41
-, di-, g.l.c. - m.s. study of benzyl esters of, 3C21
sepn. and detection, liquid chrom., 6A1*C*
-, hydroxy-, analysis, by h.p.l.c., review, 3D70
detmn., by g.l.c., deriv.-forming reagent for, 6D38
g.l.c. - m.s. study of benzyl esters of, 3C21
-, oxo-, g.l.c. - m.s. study of benzyl esters of, 3C21
-, α-sulpho-, methyl esters, analytical methods for, 4C60
rcinogens, see under *Hazards*
rdanol, detmn. in cashew-nut-shell liquid, by g.l.c., 4C91
sepn. and identn. of ethylene oxide adducts of, by t.l.c. - n.m.r., 2C66
rdboard, analysis of surface coatings and finishes for, 5C51
evaluation of odours of, by g.s.c. analysis of volatile components, 4C69
rdenolides, polarogr. study of nitrates of, 2E12
rdiac glycosides, sepn., by t.l.c., 1J18
rdol, detmn. in cashew-nut-shell liquid, by g.l.c., 4C91
-, 2-methyl-, detmn. in cashew-nut-shell liquid, by g.l.c., 4C91
rnitine, detmn., by g.l.c., 5D61
rob-bean flour, detmn. in protein-rich foods, by pptn., 1F14
rotenoids, IUPAC approved nomenclature for, 4C47
Carrageenan, detmn. in protein-rich foods, by pptn., 1F14
Carrots, detmn. of F^- in, comparison of sample-preparation methods for, 5G14
of paraquat in, by g.l.c., 6G6
Caryophyllene, identn. in valerian oil, 5E21
Casein, detmn. of bound formaldehyde in treated, spectroph., 4G9
isolation of *N*-methylated basic amino-acids from hydrolysates of, ion-exchange chrom., 2D101
Cashew-nut-shell liquid, analysis of hydrogenated and methylated, by g.l.c., 4C91
detmn. of olefinic composition of phenols in, by t.l.c. - g.l.c. of methyl ethers, 4C91
Cassia bark, detection in cinnamon, by t.l.c. examination of essential oil, 6E20
Cassiterite, detmn. in tin ores, volum., 1B88
Catalysts, detmn. of Co and Ni in, spectroph., 5B206
of Ir and Pd in Al-based, amperom., 6B226
of Mo in, spectroph., 5B166
of Pd in, by H or O adsorption - g.c., 4B165
spectroph., 3B165
of Re in alumina - rhenium, polarogr., 2B129
of Ru in, X-ray emission spectrom., 6C8
Catechin, detmn. of monomeric and dimeric, in beer, by g.l.c. of trimethylsilyl deriv., 1F18
Catechol, detection and detmn., by t.l.c., 2C36
detmn., spectroph., 1C37
in resorcinol, potentiom., 5C31
Catecholamine derivatives, analysis, resonance Raman spectrom., 2A1*C*
sepn., by h.p.l.c., 5D62
sepn. and detmn. in urine, liquid chrom. - fluorim., 6D55, 6D56
Cathepsin B, see under *Enzymes, specific*
Cations, detection, by colour reactions applied to individual ion-exchange-resin grains, 1B4
detmn., indirect coulom., review, 5B12
with use of redox columns, 3B2
X-ray spectrom., pre-concn. on modified silica gels for, 3B15
ion-exchange studies of, in HBr (or HCl) - acetone media, 1B2, 1B3
in org. acid or salt media, 3B4
in $HClO_4$ - pyridine media, 5B20
of Group II, 6B11
with Amberlite CG-400 in formic acid-containing media, 2B5
paper-chrom. study of, 3B3
sepn., by ion-exchange t.l.c., 2B6
extraction paper chrom., in sulphoxide media, 2B2
magneto-electroph., 6B2
with use of org. bases, 3B144
sepn. and identn., by t.l.c., 2B23
paper chrom., 5B3
without use of H_2S or other sulphides, 2B1
solvent extraction of, with *O*-isopropyl ethylthiocarbamate, 2B3
Cebegine, detmn. in feeding-stuffs, by g.l.c. of free base, 3G20
Cefazolin, detmn. of 2-mercapto-5-methyl-1,3,4-thiadiazole in, by n.m.r., 4E23
Celery, detmn. of F^- in, comparison of sample-preparation methods for, 5G14
Cellulose, carboxymethyl-, detmn. in detergents, spectroph., 4C61
in protein-rich foods, by pptn., 1F14
—, hydroxyethyl-, detmn. of average degree of substitution of, volum., 4C68
Cellulose acetate, detmn. of H_2O in soln. of, by ultrasonic method, 6C76
Cellulose derivatives, analysis, applications of gel-chrom. methods in, review, 4C87

Cellulose esters, detmn. of bound formaldehyde in, polarogr., 6C77
Cellulose ethers, analysis, and applications in tobacco industry of, review, 3C69
detmn. of OH-groups in highly substituted, i.r. spectroph., 1C9
of methyl-, hydroxyethyl- and methylhydroxyethyl-, apparatus for Zeisel method for, 1C10
Cement, detmn. of Al, Ca and Si in raw slurries of, by n.a.a., system for, 2J151*P*
of Ca and Fe in raw slurries of, continuous radiom., 6B238
of elements in, X-ray spectrom., inter-element effects in, 4B173
of F in, photom., 4B126
of Zn in Portland, fluorim., 1B179
Centrifugation, bio-sepn. by zonal, 2A5*C*
modern aspects of ultra-, 2A5*C*
optical system for use with fast analyser, 5A2*C*
Cephalexin, sepn. and identn. of impurities in, by t.l.c., 5E24
Cephalosporins, detmn. in pharmaceutical preparations, colorim., manual and automated procedures for, 6E12
sepn. from other antibiotics and each other, and detmn. of impurities in, by h.p.l.c., 2E16
Cephazolin, detmn., automated u.v. spectroph., 2E19
3-Cephem-4-carboxylic acid, 7-amino-3-methyl-, identn. in cephalexin, by t.l.c., 5E24
Ceramics, detmn. of elements in, X-ray spectrom., inter-element effects in, 4B173
methods for analysis of lead - zirconium titanate systems, 6B237
Ceramides, sepn. of monoglucosyl- and monogalactosyl-, by t.l.c., 3D74
Cereal products, see also *Bakery products*
detmn. of added sucrose in sweetened, automated enzymic - colorim., 3F7
of dietary-fibre content of, enzymic - gravim., 5F4
of nicotinamide and nicotinic acid in, collaborative study of, 2F49
of tryptophan in, interference in Spies - Chambers method for, 5G4
Cereals, see also *Barley*; *Buckwheat*; *Maize*; *Millet*; *Rice*; *Rye*; *Wheat*
analysis, application of near-i.r. reflectance-spectroph. methods in, 3G5
assay of α-amylase in, improved dyed amylose for use in, 2D160
detection of guanine in, by t.l.c., 3F8
detmn. of carboxin in, by t.l.c. - spectroph., 4G25
of Co in, by a.a.s., 4G8
of lysine in, spectroph., 2G8
of Mn ethylenebisdithiocarbamate in, spectroph., 5G30
of Hg in, by a.a.s., 3G1
of organochlorine pesticides in, by t.l.c., clean-up procedure for, 3F21
of Se in, fluorim., 5F9
of strychnine in baits based on, by g.l.c., 4G42
by h.p.l.c., 4G41
of tryptophan in, spectroph., 2G7
Cerebrospinal fluid, analysis of amine metabolites in, by m.s. of pentafluoropropionyl deriv., 4D52
detmn. of (3,4-dihydroxyphenyl)acetic and 4-hydroxy-3-methoxyphenylacetic acids in, by g.l.c. of pentafluoropropionyl deriv., 2D39
of glucose in, spectroph., 3D55
of 5-hydroxyindol-3-ylacetic acid in, fluorim., 2D95
of prostaglandin $F_{2\alpha}$ in, by g.l.c. of trimethylsilyl deriv. of methyl ester - m.s., 2D73
Cerebrospinal fluid—*continued*
m.s. study of 5-hydroxy- and 5-methoxy-tryptophol in, 6A1*C*
Cerium, detmn., coulom., 5B98
potentiom., 5B97
spectrogr., 4B55
effect of NaCl carrier in, 5B94
spectroph., 1B13, 6B86
in alkaline-earth-metal fluorides, spectrogr., 6B59
in iron, amperom., 1B148
in Nichrome, complexom., 1B164
in presence of Th, with use of $NaIO_4$, 4B58
in rare-earth concentrates, by n.a.a., 6B85
in sediments, by n.a.a., 2H17
in steel, amperom., 1B148
emission spectrom., 1B144
X-ray emission spectrom., 3B151
in water, by n.a.a., 2H16
spectrogr., 1H24
sepn. from Am, Cm and Y, ion-exchange chrom., 2B72
from Th and U, paper chrom., 6B1
solvent extraction of, with amine oxides, 3B80
Cerium, reagents for, 4-methoxy-*N*-*m*-tolylbenzohydroxamic acid, 1B13
protocatechuic (3,4-dihydroxybenzoic) acid, 6B86
Se analogues of azolidines, 5B2
Cerium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Cerium(IV) oxide, detmn. of lanthanoid impurities in, spectrogr., 2B63
α-Chaconine, sepn. from other potato glycoalkaloids, by g.l.c. of permethyl deriv., 1G3
β-Chaconine, sepn. from other potato glycoalkaloids, by g.l.c. of permethyl deriv., 1G3
Chamomile, detmn. of *cis*- and *trans*-spiro-ethers in, liquid chrom., 6E21
of triazine herbicides in, by t.l.c., 1G13
Chavicine, identn. and detmn. in pepper or pepper extracts, by h.p.l.c., 3F16
Cheese, detmn. of lactones in Cheddar, by g.l.c., 6F20
of phenethylamine in, by g.l.c. of trifluoroacetyl deriv., 1F3
of Se in, fluorim., 5F9
identn. and detmn. of lactones in ripening blue, by g.l.c., 5F32
Chelating agents, detmn. in presence of interfering metal ions, by ion exchange - a.a.s., 3A6
Chemical oxygen demand, detmn., interference by Cl^- in $K_2Cr_2O_7$ method for, 4H43
of effluents produced in paper- and pulp-industry, by rapid permanganate test, 5H41
of industrial wastes, detmn., sample preservation for, 3H45
of surface or waste waters, detmn., semi-automated spectroph., 3H30
Chemiluminescence, in gas analysis and flame emission spectrometry, review, 2A9
Cherry juice, detmn. of Cl^- in, potentiom., with ion-sensitive electrode, 2F6
Chewing gum, analysis, scheme for, 4F15
Chinese gooseberry, identn. and detmn. of acids and sugars in fruit of, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
Chloramben, detmn. in Lima beans or tomatoes, by t.l.c. - densitom., 2G21
Chloramine T, detmn. in ice-cream or milk, by g.l.c., as benzoic acid, 3F13
Chloramphenicol, detmn. in urine, with its metabolites, by g.l.c. - m.s., 4D16
t.l.c. study of, 6E13
Chlorate, detmn., polarogr., 4B131
potentiom., ion-sensitive electrode for, 5J92

lorbufam, identn. and detmn. in presence of other pesticides, by t.l.c., 2G35
lordane, detmn. in foods, by g.l.c., 4G32
lordiazepoxide, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
of 7-chloro-1,3-dihydro-5-phenyl-2*H*-1,4-benzodiazepin-2-one 4-oxide in, spectroph., 4E33
h.p.l.c. study of, 4E36
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
lorfenethol, detmn., by g.l.c. of trifluoroacetyl ester, 3G38
lorhexidine, detmn., by g.l.c., 2E40
in pharmaceutical preparations, by automated h.p.l.c., 2E39
loride, detection, by CrO_2Cl_2 formation, 4B129
detmn., argentim., improvement of end-point in, 3B133
indicator for, 3B132
by indirect a.a.s., 3B134
by kinetic - spectroph. method, 3B135
potentiom., with silver - silver sulphide electrode, 1B10
spectroph., 3B135
in beer or wort, potentiom., with ion-sensitive electrode, 3F31
in blood, errors attributable to sample storage in, 1D2
in blood serum, correction for turbidity in, 1D1
in cadmium selenide, amperom., 5B79
in fruit juices, potentiom., with ion-sensitive electrode, 2F6
in phosphates, potentiom., with ion-sensitive electrode, 5B139, 5B140
in presence of other halides, potentiom., with ion-sensitive electrode, 4B92
in presence of Cl, HOCl and H^+, volum., 4B130
in surfactants, potentiom., German standard methods for, 1C62
in water, by programmed coulom. titration in flowing soln., 2H39
ion-exchange chrom. - coulom., 3H32
in yttrium compounds containing Si, potentiom., with ion-sensitive electrode, 1B63
sepn. from Br^- and I^-, or from CO_3^{2-} and SO_4^{2-}, ion-exchange chrom., 5J17
from other halides, gel chrom., 1B130
lorine, analysis of products of reaction with CH_4 of, by g.c., 1C17
detmn. in air, by g.c., 3B131
in air-borne dust, by n.a.a., 2H5
by X-ray fluorescence analysis, absorption correction for, 5H2
in boron, X-ray spectrom., 4B42
in org. compounds, see under *Organic elementary analysis*
in plants, standards for, 2D4
in presence of Cl^-, HOCl and H^+, volum., 4B130
in selenium, spectroph., 3B122
in urine, by n.a.a., 4D6
in water, by n.a.a., 2H16
of free, in water, photom., 5H31
of free and combined available, in water, colorim., 1H34
lorine dioxide, detmn., spectroph., 3B136
in air, pulsed-flow coulom., 1H8
lorine fluorides, detmn. in air, as SiF_4, by g.c., 3B131
lorobenzilate, detmn., by g.l.c. of trifluoroacetyl ester, 3G38
lorobromofebrifugine, see *Cebegine*
loroform, detmn. in biol. materials or water, by g.c., pre-concn. method for, 5H33
in pharmaceutical preparations, by n.m.r., 1E47
Chloroform—*continued*
inadequate protection afforded by rubber gloves in handling of, 4A20
Chlorophyll, liquid scintillation counting of ^{14}C-labelled, 3D104
— ***a*,** purification, partition chrom., 6D69
Chloropropylate, detmn., by g.l.c. of trifluoroacetyl ester, 3G38
Chloroquine, detmn. in biol. tissues, blood or urine, by g.l.c., 4D29
solvent extraction of, with toluene, 6D15
Chlorothiazide, h.p.l.c. study of, 2E49
Chlorpromazine, detmn., fluorim., 1E33, 6E25
— **sulphoxide,** detmn., fluorim., 1E33
Chlorprothixene, detmn., fluorim., 1E33
in urine, by m.s., 6D26
Chlortetracycline, detmn. in tetracycline, by h.p.l.c., 3E21
by t.l.c. - fluorim. (or u.v. spectroph.), 5E23
Chocolate, detection of shea-fat in fat of, colour reaction for, 3F51
detmn. of light filth in, 5F20
of phenethylamine in, by g.l.c. of trifluoroacetyl deriv., 1F3
particle size analysis and evaluation of, 5F19
Cholanoic acids, identn. and detmn. in biol. tissues, by t.l.c. - g.l.c. (or g.l.c. - m.s.) of trifluoroacetyl deriv. of methyl esters, 1D59
Cholanthrene, 3-methyl-, detmn. in water, by g.l.c. - m.s., 3H39
Cholecalciferol, sepn. from retinol and α-tocopherol, by h.p.l.c., 2J10
Cholesterol, detmn., enzymic - potentiom., automated, 4D43
enzymic - spectroph., substrate specificity of enzyme for, 2D79
fluorim., 4D44
in biol. tissues or blood serum, spectroph., non-extraction procedure for, 5D55
in blood plasma or blood serum, by automated g.l.c., 3D73
in blood serum, automated, with use of Centrifichem system, 4D42
comparison of automated methods for, 2D78
comparison of methods for, 4A1*C*
correction for turbidity in, 1D1
enzymic - spectroph., with use of centrifugal analyser, 5D56
spectroph., 1D52
in egg yolk, spectroph., 6F15
in foods, by g.l.c. of trimethylsilyl ether, 2F48
in urine, by g.l.c., 3D76
in water, with coprostanol, by g.l.c. of trimethylsilyl deriv., as indication of faecal pollution, 1H40
of microsomal, by t.l.c. - radiom., 4D45
Cholesterol 7α-hydroxylase, see under *Enzymes, specific*
Cholesterol oxidase, see under *Enzymes, specific*
Cholesteryl esters, analysis of long-chain acids of blood-plasma, by g.c., 6A1*C*
Choline, detmn., by g.c. - m.s., comparison of techniques for, 1D63
in brain tissue, by pyrolysis - g.l.c., 2D92
— **esters,** detmn., by g.c. - m.s., comparison of techniques for, 1D63
Choline, acetyl-, detmn. in brain tissue, by pyrolysis - g.l.c., 2D92
Choline derivatives, m.s. study of, 1E48
Cholinesterase, see under *Enzymes, specific*
Chondroitin sulphate, sepn. from other arterial-wall mucopolysaccharides, electroph., 3D57
Chromate, detmn. in presence of other oxy-anions, polarogr., 1B120

Chromate, determination in presence—*continued*
of MnO_4^- and VO_3^-, by reactive ion exchange - a.a.s., 5B25
in radioactive-waste supernate, laser - Raman spectrom., 4H37
Chromatin, comparison of methods for preservation of, for electrophoresis, 3D103
Chromatography, computerised multi-cuvette system for, 5A2*C*
physicochemical significance of data in, 2A1*C*
report of symposia on, 4A5, 6A1, 6J31
Chromatography, gas, apparatus for, adsorption attachment for, for trace gas detmn., 5J26
air-borne, for study of pesticide-vapour drift, 4J29
for sepn. and detmn. of mass and radioactivity of fermentation gases, 2D13
miniature, 2J28
with automatic concentrator, for trace analysis, 2A1*C*
applications of, in analysis of environmental materials, review, 2H1
in inorg. analysis, 2A1*C*
base-line noise and detection limits in, 2J41
columns for, electron-microsc. study of 'whisker-walled', 6J20
evaluation of relative retention reproducibility on wall-coated and support-coated open-tubular, 3J42
columns for, freeze-dry method for coating stainless-steel capillary, 2J33
glass capillary, internally coated with NaCl, 3J31
report of symposium on use of, 2A6
procedures for cleaning and re-coating open-tubular, 3J30
quality assessment of, 4J21
use of sepn. values to express relative performance of, 2J42
compilation and retrieval of data in, using log. scale and retention-index system, 6J30
computer program for calculation of optimum phase composition and temp. conditions for sepn. in, 4A18
coupled with i.r. spectrophotometry, 3C1
coupled with m.s., applications of, in pesticides analysis, review, 3G34
clinical applications of computerised systems for, 5A2*C*
computer program for use in, 2A21
computer system for, 2A1*C*
computerised system for vapour-phase qualitative/quantitative analysis by, 2A7*C*
evaluation of computer program for specific-ion monitoring in, 2A7*C*
inexpensive diverter valve for, 6J29
instrumental and statistical considerations for accurate quantitative analysis by, 2A1*C*
interface with standard laboratory data system for, 3J47
method for mass-range-specific detection in, 1J27
peak-squaring device for use in, 2J43
preferred stationary liquids for, 6J26
reference compound to calibrate ion-abundance measurements in, 2A19
report of symposium on metabolite identn. by, 4A1
stable-isotope ratiometer for use in, 5A2*C*
derivatisation for, review, 5J27
detectors for, effect on peak height of dynamics of, 6J28
electron-capture, voltage effects in d.c., 1J23
with ^{63}Ni source, 4J31
Chromatography, gas, detectors for—*continued*
flame ionisation, combined with gas-density balance, 4J25
compared with gas-density balance, 5J32
for *N*-nitrosamine detection, 4F5
response of, to H_2O and formic acid, 3J46
flame-photom., for detmn. of S compounds, 4J30
selectivity of, 5J31
for use in pesticides analysis, review, 3G33
^3H ionisation-cross-section, 1J24
microwave-induced emission-spectrom., effect of doping gases on selectivity and sensitivity of, 6J27
point-discharge, 1J25
selectivity of device based on principle of Beilstein test for halogenated org. compounds, 5J33
semiconductor, for studies of ^{14}C-labelled compounds, 1J26
detmn. of compounds with overlapping peaks by, by absolute calibration with 'sample meter', 3J44
detmn. of sample vol. when using gas-tight syringes in, 2J30
device for preparing gaseous standards of traces of org. substances for, 2J32
elimination of extraneous peaks in, 5J34
ferrules of polyamide - polyimide black copolymers for, 1J19
flow meter for use in, 4J3
fraction collector for, for trapping air-sensitive high-boiling materials, 3J40
for use with aerosol-forming substances, 2J39
glass inlet-splitter for, 4J27
head-space analysis by, sampling device for use in, 4J23
sampling device for vapours from canned foods, 2J29
magnetic-tape-cassette data-logging system for, 2J40
mixed-bed column technique for, 6C1
off-line data reduction with programmable calculator in, 2A1*C*
peak evaluation in, comparison of peak-area and peak-height measurement for, 3J45
pre-column - capillary column technique for, for trace detmn. in crude extracts, 6J19
process control by, review, 5J25
pyrolysis - , automated apparatus for Curie-point, 4J28
effect of metal loading to increase absorptivity in laser technique for, 6J18
quantitation in, 2A1*C*
resolution of enantiomers by, review, 5D65
resolution of overlapping peaks in, 4J19
retention index calculation by Takacs method in, 3J41
retention-vol. detmn. in, with use of on-line minicomputer, 4J32
sample introduction in, cartridge desorption port for, 6J17
device for analysis of gases contained in hollow micro-spheres, 4J24
modified Vogel-type high-pressure valve for, 4J25
technique for use with gaseous reaction products, 3J29
sample phial with septum-holding device for use in, 3J28
stationary phases for, 3J49*B*, 4A5*C*
analysis of similarities and dissimilarities between, by use of pattern recognition, 6J25

romatography, gas, stationary phases for, *continued*
characterisation, with use of partial molar enthalpies, 3J39
choice of standard, 3J36
classification of solid, 6J21
classification schemes for, and their relevance to sepn. of fatty acids, review, 4J22
comparison of uniformity of dynamically coated films, 2J37
detmn. of amount required of, for high-temp. studies, 6J23
detmn. of org. material present in, by thermal-destruction method, 2J31
effect of electrolytes on retention and selectivity in, 2J38
F compounds containing functional group as, 5J29
for hydrocarbon and fluorocarbon analysis, 3J38
graphitised thermal carbon black as, 3C14
hydrated Sb_2O_5 as, 3J35
liquid-crystal monolayers as, 5J30
'organoclays' as, 1C53
polar macroporous polymers as, 6J22
polyesters as, 1J20
preparation of Chromosorb for use as, 3J32
pre-treatment of molecular sieve 5A for use in NO detmn., 2J35
recommended for standardisation, 3J37
silica gel modified with transition-metal chlorides as, 2J36
surface-modified silica gels as, 5J28
Tenax GC as, 3J34
thermoanalytical studies of, review, 2J159
type-Y zeolites containing alkaline-earth-metal cations as, 1J21
uncoated Teflon as, 2A4*C*
use of information theory and numerical taxonomy for selection of, 6J24
study of pre-column sample dilution in, 4J26
supports for, detmn. of org. material present in, by thermal-destruction method, 2J31
preparation of Chromosorb for use as, 3J32
pyrolytic-carbon-coated, 3J33
silica whiskers as, 2J34
uncoated Teflon as, 2A4*C*
temp.-programmed, with reversal of carrier-gas flow, 4J20
vapours as mobile phases in, review, 6J16
without carrier gas, for detmn. of compounds in low concn., 1J22
with use of moving varying-gradient temp. field, 3J43
romatography, gel-permeation, high-performance, errors caused by flow-rate variation in, 5J11
recent advances in, 2A1*C*
stationary phases for, benzylated dibromopropanol-cross-linked Sepharose as, 4J10
chemically modified silica with alcoholic OH-groups as, 2J12
Styragel as, 6J7
romatography, ion-exchange, apparatus for continuous two-dimensional sepn. by, 2J17, 2J18
automated high-pressure instrument for, 5J16
cation-responsive detectors for, 1J11, 4B5
effect of chemical composition of carrier on internal porosity of stationary phase, 2J19
stationary phases for, see *Ion exchange, materials for*
system for, with conductim. detection, 5J17
romatography, liquid, apparatus for, automated, 5J10
automatic system for cyclic, 1J5
multi-column, 3J14
Chromatography, liquid—*continued*
column packings in, bonded-phase, 2A1*C*
chemically modified silica with alcoholic OH-groups as, 2J12
in situ chemically bonded, 3J12
porous styrene - divinylbenzene polymer as, 1J9
$AgNO_3$-coated silica gel as, 3J11
Spherosil as, 2J10
tetrakis-(4-picoline)bis(thiocyanato)nickel complex - *m*-xylene (or lutidine) as, 3J10
'3-(2,4,5,7-tetranitro-9-fluorenylidenamino)-propyldiethoxysiloxane' bonded to Li-Chrosorb SI 60 as, 1C47
Zorbax-ODS as, 2A1*C*
computer program to provide gradient-elution profiles for continuous method of solvent mixing in, 3A10
coupled with m.s., interface system for, 2J15
system for, 3J15
data compilation (atomic and molecular data series AMD 41), 2J45*B*
detectors for, coulom., 5J13
current semi-integral electroanalytical device as, 6J9
dielectrom., 6J8
improvement of performance of capacitance, 1J10
polarogr., 6J10
universal photo-ionisation, 4J11
extraction, 3J48*B*
flow *versus* batch detection of radioactivity in, 4J12
high-performance, applications of, in food chemistry, review, 5F2
in pesticides analysis, review, 3G31
in pharmacology and toxicology, 2A1*C*
automated system for, 4J8
columns and column packings for, review, 2J11
coupled with i.r. spectrophotometry, 2A1*C*
data presentation in, 3J16
drum sampler for, 4J9
equipment design for, 1J8
injection-solvent-induced anomalies in reverse-phase, 5J12
preparative, 6J6
pressure testing of glass tubes and columns for, 4J7
programmable automatic sample-collection system for, 2J14
review, 1J6
ion-pair partition, 2A1*C*
optimisation of experimental conditions for, 3J13
quantitation in, 2A1*C*
resolution of enantiomers by, review, 5D65
sensor for detecting changes in outflow of liquid from columns in, 2J13
supercritical-fluid technique for, 4A5*C*
trace analysis by, 2A1*C*
Chromatography, paper, scissors for segmentation of chromatograms, 3J26
Chromatography, thin-layer, adsorbents for, glass-bound sintered oxide layers as, 2J25
computerised data storage in, 3J27
device for transfer of adsorbent from plate to test-tube, 2J26
evaluation of chromatograms in, automatic analogue time-scanning unit for, 5J23
densitometer - mini-computer for, 5J19
microscope - photometer for use with ring-oven chromatograms, 4J15
review, and discussion of methods available for chromatograms on internally coated tubes, 4J18

Chromatography, thin-layer—*continued*
evaporative technique for, 3J26
for study of catalytic dehydrogenation products of ultra-micro samples, 1J15
guide for scoring, stripping and spotting plates for, 3J21
in coated tubes, coupled with pyrolysis and flame ionisation detection, 2J27
on sintered polyalkene sheets, 1J17
on sintered silica gel - glass-coated ceramic sticks, 1J18
optimising development conditions in, 2A1*C*
programmed multiple development in, 3J23
review, and study of extended programmes in, 5J22
with lateral spot re-concn., 3J24
quantitative, in pesticides analysis, review, 3G32
recovery of material from plates for, 5J24
sample application in, automated device for application of bands or spots, 1J14
scissors for segmentation of chromatograms, 3J26
selection of systems for use with given set of compounds in, 6J15
solvent 'de-mixing' by preferential adsorption in, 6J14
synthesis and evaluation of cross-linked poly-(acryloylmorpholine) supports for gel-permeation, 3J22
thread technique for, 6C51
use of constant-boiling solvent mixtures for, 1J16
'Chromic acid', explosion hazard from, 4A21
Chromic phosphate, radio-assay of ^{32}P-labelled suspension of, by Cerenkov counting, 4E3
Chromite, detmn. of Ti in, spectroph., 3B128
Chromium, detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
detection and detmn. in aluminium alloys, flame emission spectrom., 3B63
detmn., amperom., 6B175
by a.a.s., 1B118, 2J86
extraction method for, 6B171
in $HClO_4$ media, 4B114
interferences in, 5B162
with use of micro-sampling cup system, 1B15
with use of releasing elements, 4B113
by a.e.s., with use of heated-graphite atomiser, 2B10
by co-pptn. with $PbSO_4$ - reflectance spectroph., 2D22
by proton activation, 3B21
photom., 3B125, 6B173
potentiom., 5B23
spectroph., 1B117, 4B9, 5B161, 6B174
X-ray spectrom., 1B119
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 3H5, 3H6
in aluminium, by a.a.s., 1B56
concn. method for, 4B46
in biol. materials, by a.a.s., 3D8
by n.a.a., 5A5*C*
in boric acid, by electrolysis - spectrogr., 5B85
in boron carbide, X-ray spectrom., 4B42
in corundum, by n.a.a., 4B49
in hair, by a.a.s., 6D4
in ilmenite, by a.a.s., 1B95
in iron ore, by n.a.a., 6B202
in layers plated on steel, spectrogr., 1B155
in lead silicate glasses, by a.a.s., 6B234
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
Chromium, determination—*continued*
in magnesite, X-ray emission spectrom., 6B208
in marine organisms, comparison of methods for, 3D10
in meat, by a.a.s., 5F5
in mussels, by m.s., 4F1
in petroleum or petroleum products, by a.a.s., 3C42
by a.f.s., 5B5
spectrogr., 2C49
in plants, by a.a.s., 6J54
by n.a.a., 5G1
in plutonium, by a.a.s., 2B67
in poly(methylsiloxane) liquids, spectrogr., 6C91
in presence of Co, Cu and Ni, by chemiluminescence method, 5B163
of Cu, amperom., 2B116
of Fe and Ni, X-ray spectrom., correction for inter-element effects in, 4B143
in rare-earth-metal compounds, colorim., 1B64
in sediments, by a.a.s., 6H26
by n.a.a. or spectrogr., 2H17
in situ X-ray emission spectrom., 6H25
in silicates, X-ray emission spectrom., 4B67
in steel, by a.a.s., 1B156, 3B148
by m.s., 4B144
by n.a.a., 6B202
colorim. 4B151
comparison of methods for, 1B145
emission spectrom., 1B144, 4B145
spectrogr., 1B154
with ion micro-probe, 2J111
X-ray emission spectrom., 6B208
detection limits in, 5B195
in steel-corrosion products, X-ray spectrogr., 2B139
in tin, by n.a.a., 5B124
in titanium dioxide, by n.a.a., 5B128
in TiO_2-based pigments, by a.a.s., 1B95
in uranium, by a.a.s., 2B67
in uranium oxides, by a.a.s., 5B108
in urine, by a.a.s., 3D23
by n.a.a., 4D6
in vanadium, spectrogr., 6B155
in water, by n.a.a., 2H16, 6B20
spectrogr., 5H19
of C in, by high-temp. oxidation, 5B113
by photon activation, 3B127
of C distribution in, by laser sampling - m.s., 5B8
of Cr^{III} and Cr^{VI} in presence of each other, by a.a.s., 6B172
photom., 1B114
ring colorim., 1B115
spectroph., 1B116
of H in, by g.s.c., 3B20
of metallic, in products of reduction of iron ores, dissolution method for, 5B194
sepn. from Bi, paper electroph., 3B5
from Hg, by solvent extraction, 6B67
from Mo, by solvent extraction, 1B124
from Ti, by t.l.c., 3B95
from V, by solvent extraction, 5B151
solvent extraction of, with esters of dithiocarbamic acids, 4B2
with 4-(5-nonyl)pyridine, 1B121
—, bisarene-, iodides, detmn., by m.s., 3C35
Chromium, reagents for, *p*-anisidine (or *p*-phenylenediamine) - $K_3Cr(CN)_6$, 4B9
arsenazo III, 5B161
diantipyrinylmethane, 4B151
diphenylcarbazide, 1B64, 1B114, 1B116
edta, 6B173

hromium, reagents for—*continued*
glycinethymol blue, 6B174
$K_4Fe(CN)_6$, 1B117
4-(2-pyridylazo)resorcinol, 3B125
thoron, 5B161
tropolone, 1B115
hromium alloys, detmn. of H in, by g.s.c., 3B20
–, Cr - Al, phase analysis, and electrochem. dissolution of, 5B19
–, Cr - Fe, analysis, sample preparation for, 4B142
detmn. of C in, by high-temp. oxidation, 5B113
–, Cr - Fe - Ni, analysis, with electron micro-probe, 6J37
–, Cr - Ni, detmn. of Al in, photom., 5B164
of Ce in, complexom., 1B164
–, Cr - Si, detmn. of composition and thickness of films of, X-ray emission spectrom., 5B119
hromium complexes, sepn. of cyano(thiocyanato)-chromates(III), electroph., 1J12
sepn. and detmn., by h.p.l.c. - a.a.s., 3C29
with acetylacetone, gel-chrom. study of, 3B20
hromium ores, detmn. of Ti in, spectroph., 3B128
hronopotentiometry, apparatus for, 3J88
hrysene, sepn. from other hydrocarbons, by h.p.l.c., 2J10
hrysophanol, detmn. in preparations of frangula bark, by t.l.c. - spectroph., 1E13
sepn. from aloe emodin, emodin and physician, by h.p.l.c., 3E15
hymotrypsin, see under *Enzymes, specific*
igarette smoke, see *Tobacco smoke*
inchocaine, detmn., fluorim., 2E35
inchona, detmn. of alkaloids in extracts or tinctures of, by ion exchange - complexom., 6E6
volum., 2E7
identn. of tincture of, in drops, by t.l.c., 4E10
inchonine, detmn., non-aq. coulom., 1C3
innamaldehyde, detection, by g.l.c. of 2,4-dinitrophenylhydrazone, 2C17
innamic acid, α-phenyl-, detmn., spectroph., 2C41
***rans*-Cinnamic acid 4-hydroxylase,** see under *Enzymes, specific*
innamohydroxamic acid, *N*-phenyl-, detmn., by coulom. titration, 2C43
innamon bark, detection of cassia bark in, by t.l.c. examination of essential oil, 6E20
innamonitrile derivatives, sepn. of *cis-* and *trans-*isomers of *o-* and *p*-substituted, by g.l.c., 4C41
innamyl alcohol, detmn., iodim., 5C32
itral, detection, by g.l.c. of 2,4-dinitrophenylhydrazone, 2C17
detmn. in lemon oil, i.r. spectroph., 1C64
itrate, detmn. in detergent products, enzymic - spectroph., 3C64
itric acid, detection and detmn. in baking powder, by g.l.c. of trimethylsilyl deriv., 2F33
detmn., by chemiluminescence method, 5E4
in aq. soln., by g.l.c., extraction conditions for, 4C20
in presence of fumaric, malic and succinic acids, paper chrom. - photom., 1D42
of HCl or HNO_3, potentiom., 3A8
of *N*-nitrosamines in, by g.c., 6F5
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
sepn. from lactic and malic acids and their salts, by t.l.c., 3E47
from other citric-acid-cycle acids, liquid chrom., 1D41
- salts, sepn. from citric acid and from lactic and malic acids and their salts, by t.l.c., 3E47
Citrus fruit, see also *Oranges*
detection and detmn. of aflatoxin B_1 in feedingstuffs containing, by t.l.c., 3G17
detmn. of biphenyl in products of, by h.p.l.c., 4F25
of biphenyl and 2-phenylphenol in, spectroph., 1G15
of biphenyl, 2-phenylphenol and thiabendazole in, liquid chrom. - g.l.c., 3F20
of thiabendazole on, by t.l.c. - fluorim., 2G25
sepn. and identn. of carbonyl compounds in peel and juice of, by g.l.c. of 2,4-dinitrophenylhydrazones, 2C17
Citrus-fruit juices, see *Grapefruit juice*; *Orange juice*
Clays, analysis of alunitic, 5A6*C*
detmn. of F^- in, colorim., 6H14
of Ni in, by kinetic method, 6B215
of quartz in, by d.t.a., 5A6*C*
Clidinium, h.p.l.c. study of, 4E36
Clinical analysis, data-logging system for steady-state continuous-flow analysers for, 4J6
interactive computer control as applied to instruments for, 2A1*C*
procedures used in studies of metabolic diseases, 2D2
report of conferences on, 4A1, 5A2
report of symposium on applications of computers in, 2A2
Clinker, detmn. of F in, photom., 4B126
Clioquinol, detmn. in presence of corticosteroids, partition chrom. - u.v. spectroph. or colorim., 1E40
of di-iodohydroxyquinoline, volum., 4E38
of conjugates of, in urine, by h.p.l.c., 3D45
Clomid, sepn. of *cis-* and *trans-*, by g.l.c., 2E51
Clomiphene citrate, see *Clomid*
Clonazepam, detection in blood plasma or urine, by t.l.c., 5D20
Clorazepate, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
— potassium, detmn. in blood plasma, by g.l.c., 5D23
in presence of other benzodiazepine deriv., polarogr., 1E35
Clover, detmn. of NO_3^- in, potentiom., with ion-sensitive electrode, 2G10
of V in, spectroph., 4D11
Cloxazolam, detmn. in biol. fluids or pharmaceutical preparations, spectroph., 3E38
Coal, analysis, B.S.I. specification for, 2B161
of fuels derived from, by m.s., 2A7*C*
detmn. of ankerite, calcite and dolomite in, by d.t.a., 4B170
of As in, by g.c. - emission spectrom., 3D19
of Be in, by a.a.s., 6B231
of CO_2 in, gravim., 4B169
of elements in, by activation analysis and other techniques, 6A3*C*
by n.a.a., 6A3*C*
of elements in, and in products of treatment of, by n.a.a., 5A5*C*
of humic acids in brown, colorim., spectroph. or volum., 2G4
of Hg in, by a.a.s., 1G5
of org. S in, with electron micro-probe, 5C46
of O and N in, by n.a.a., 5A5*C*
of U in, by n.a.a., 3B171
elemental concn. in National Bureau of Standards reference materials, 3B170
fractionation of hydrocracked extracts of, liquid chrom., 6C69
sepn. and detmn. of organometallic compounds in liquefied, by h.p.l.c. - a.a.s., 3C29

Coal ash, detmn. of As in, by g.c. - emission spectrom., 3D19
of Be in, by a.a.s., 6B231
of elements in, by n.a.a., 5A5*C*
elemental concn. in National Bureau of Standards reference materials, 3B170
Coal gas, properties and evaluation of, and of by-products of, review, 3C58
Coal tar, analysis of distillate of, by g.l.c. - i.r. spectroph., 3C1
review of technology of, 3C57
Coatings, see also *Paints*
analysis, applications of gel-chrom. methods in, review, 4C87
analysis and study of, review of spectrosc. techniques for, 3C86
Cobalamin, detmn. in blood serum, by protein-binding method, 5D90
—, **cyano-,** detmn., by h.p.l.c., anomalous effects in, 5J12
in blood serum, by protein-binding method, 5D91
in presence of other vitamin B compounds, by t.l.c. - densitom., 2E23
of Co in, spectroph., 5B202
Cobalt, concn., by co-pptn. on $MnO(OH)_2$, 4B15
liquid chrom., 2B14
detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
colour reaction for, 1B158
detmn., by a.a.s., 2J86
electrolytic pre-concn. method for, 6B8
spectral interference in, 5J52
with use of micro-sampling cup system, 1B15
by a.f.s., 2J83
by catalytic - ring-oven method, 4B6
by kinetic - thermom. method, 5B203
complexom., indicators for, 1B159, 3B14
gravim., 1B25, 5B205
photom., 2B147
polarogr., 3B157
potentiom., 4B11
spectroph., 3B14, 4B152, 4B153, 5B200, 5B201, 5B202, 6B140
stripping chronopotentiom., 5B11
X-ray emission spectrom., diluent effects in, 1B14
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5, 6H5
emission spectrom., 4H4
in alloys, spectroph., 5B204
in aluminium, by a.a.s., 5A5*C*
in ammoniacal electrolyte, polarogr., 6B210
in aq. soln., X-ray spectrogr., without use of standards, 4J40
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by a.a.s., 3D8
by n.a.a., 4D5
in biol. tissues, by a.a.s., extraction method for, 3D27
in blood or blood serum, by a.a.s., 3D9
in boric acid, by electrolysis - spectrogr., 5B85
in cadmium, spectroph., 1B48
in copper, spectrochem., 4B28
in feeding-stuffs, by a.a.s., 4G8
in ferrites, spectroph., 6B206
in fruit, polarogr., 4F2
in hair, by a.a.s., 6D4
in high-temp. alloys, spectroph., 3B85
in lead silicate glasses, by a.a.s., 6B234
Cobalt, determination—*continued*
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in materials for ferrite production, by n.a.a., 3B147
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in meteorites, spectroph., 2B79
in minerals, ores or rocks, by a.a.s., with direct introduction of powdered sample into flame, 5B217
in mussels, by m.s., 4F1
in plants, by a.a.s., 6G3
by n.a.a., 5G1
in presence of Cu and Ni, by t.l.c. - reflectance spectroph., 5B41
of Fe, spectroph., 6B209
of Fe and Ni, spectroph., 4B140
of Ni, spectroph., 4B156, 5B206
of other elements, by t.l.c. - colorim., 2B15
in sediments, by a.a.s., 6H26
by n.a.a. or spectrogr., 2H17
in silicates, by a.a.s., 2B77
spectroph., 2B79
in steel, by a.a.s., 3B148
by m.s., 4B144
spectroph., 2B79
in tin, by n.a.a., 5B124
in uranium, spectroph., 3B85
in uranium oxides, by a.a.s., 5B108
in urine, by n.a.a., 4D6
in vanadium, spectrogr., 6B155
in water, 6H29
by a.a.s., 2H18
by n.a.a., 2H16, 6B20
ion-exchange chrom. - a.a.s., 5H20
spectrogr., 5H19
of C in, by high-temp. oxidation, 5B113
of Cr, Cu and Ni in, by proton activation, 3B20
of Mo in, by proton activation, 5B168
of Ag in, spectroph., 3B45
identn. and detmn. of impurities in, by proton activation, 3B158
sepn. from Bi, Cu, Mo and Ni, by t.l.c., 5B4
from Bi or Ag, paper electroph., 3B5
from Cd, Cu, In, Hg and Zn, by ion exchange, 1B2
from Cd, Cu, Pb, Mn and Zn, ion-exchange chrom., 1B17
from Cd, Cu, Pb, Ni and Zn, ion-exchange chrom., 1J11
from Cu, by solvent extraction, 1B7
from Cu, Fe and Ni, by t.l.c., 1B19
from highly saline matrices, by selective pptn., 6B12
from Fe, by solvent extraction, 1B136
from Hg and Ag, by solvent extraction, 2B37
from Ni, by electro-dialysis, 2B148
from Th and U, paper chrom., 6B1
from Ti, by t.l.c., 3B95
from V, ion-exchange chrom., 3B115
solvent extraction of, with aliphatic amines, 2B21
with benzoic acid - butylamine (or pyridine), 6B9
with esters of dithiocarbamic acids, 4B2
with hexanoic or 2-bromohexanoic acid in presence of amines, 4B154
sorption of, on $Al(OH)_3$, $Fe(OH)_3$ and $La(OH)_3$, 2B16
on modified clinoptilolites, 6B211
Cobalt, reagents for, αα′-azinodi-(3-hydroxy-2-picoline), 5B206
benzidine - dimethylglyoxime, 2B147
2-benzoyl-3′-nitroacetanilide, 5B205

balt, reagents for—*continued*
chlorindazon DS, 4B152, 4B156
4-(5-chloro-2-pyridylazo)-*m*-phenylenediamine, 4B153
4-(3,5-dibromo-4-methyl-2-pyridylazo)-*m*-phenylenediamine, 2B79
3′,5′-dichloro-2-hydroxyacetophenone oxime, 1B25
3′,5′-dichloro-2′-hydroxyacetophenone oxime, 5B201
dithizone, 2B15, 6B206
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
1-hydroxy-2-nitroso-3*H*-naphtho[2,1-*b*]pyran-3-one, 1B158
3-hydroxy-3-phenyl-1-(3-pyridyl)triazen, 6B209
1-nitroso-2-naphthol, 3B85
poly-(8-hydroxy-5-vinylquinoline), 6B12
purpurinsulphonic acid Na salt, 6B140
pyrazinecarboxamide, 5B202
1-(2-pyridylazo)-2-naphthol, 4B140
tiron, 5B200
balt alloys, detmn. of Sb in, coulom., 1B86
of Cu and Ni in, a.c. polarogr., 6B213
–, Co - Fe, detmn. of Co in, spectroph., 5B202
balt aluminate, X-ray photo-electron studies of, 6B212
balt complexes, sepn., by t.l.c., comparison of plates for, 4B155
with acetylacetone, gel-chrom. study of, 3B22
with aliphatic hydroxamic acids, 6A8
with mono- and di-hydrazones of benzil and 2,2′-pyridil, 5A10
with picolinaldehyde thiosemicarbazone, 5B16
balt ferrate, X-ray photo-electron studies of, 6B212
balt(II) hydroxide, X-ray photo-electron studies of, 6B212
balt oxides, X-ray photo-electron studies of, 6B212
balt salts, detmn. of Th in, concn. by co-pptn. for, 1B69
of Zr in, with concn. by co-pptn., 4B157
bcaine, detection, optimum concn. of Dragendorff reagent for, 3E11
in urine, by t.l.c., 6D17
detmn., fluorim., 5E7
in presence of its metabolites, by g.l.c. of pentafluoropropionyl deriv. of reduction product, 3D30
bcoa, detmn. of light filth in, 5F20
bdeine, detection, optimum concn. of Dragendorff reagent for, 3E11
detmn., fluorim., 1E33
polarogr., 1E5
in analgesic tablets, by g.l.c., 6E4
in blood serum, by g.l.c., 6D16
in crude drugs, by TAS technique, 2E8
in pharmaceutical preparations, volum., 4E12
in presence of aspirin and phenacetin, non-aq. volum., 4E30
of ethylmorphine, i.r. spectroph., 6E3
identn., by t.l.c., 3E4
in opium, by g.l.c. - m.s., 6E2
sepn. from morphine and papaverine, by t.l.c., 5E9
- hydrochloride, detmn., volum., 2E6
- phosphate, detmn. in analgesic tablets, by g.l.c., 6E4
in presence of aspirin, caffeine and phenacetin, by g.l.c., 5E12
of aspirin and caffeine sodium benzoate, potentiom., 2E31
bdeine, dihydro-, detection, optimum concn. of Dragendorff reagent for, 3E11
bdethyline, see *Ethylmorphine*

Cod-liver oil, analysis of diacylglycerols in, by g.l.c of trimethylsilyl deriv., 4F35
detmn. of vitamin A in, 6E15
Coenzyme A, detmn., by g.l.c., as pantolactone, 5E25
enzymic amplification method for, 1D82
—, acetyl-, detmn., enzymic amplification method for, 1D82
—, acyl-, detmn. in lipid mixtures, sepn. scheme for, 5D53
Coffee, analysis of oil in green beans, particle-size effects in, 6F26
detmn. of caffeine in, gel chrom., 4F27
Cohumulone, detmn. in hop extracts, by n.m.r., 5F51
Coins, detmn. of Cu, Ag and Zn in, by n.a.a., 6B44
Coke, analysis, B.S.I. specification for, 2B161
detmn. of trace metals in petroleum, by a.a.s., and flame emission spectroph., 6C65
Colchicine, detmn. in galenicals or pharmaceutical preparations, by reduction - colorim. (or volum.), 5E16
Collagenase, see under *Enzymes, specific*
Colocynth-seed oil, analysis of alkanes and primary aliphatic alcohols in, by t.l.c. - g.l.c., 5E20
Colorimetry, automatic system for, 3J7*P*
Colupulone, detmn. in hop extracts, by n.m.r., 5F51
Computers, applications of, 3A15*B*
in absorption spectrophotometry, 2J94, 3J66, 3J67, 5J53
in α-track counting, 3J90
in a.a.s., 6J58
in a.f.s., 2A1*C*, 5B5
in automated colorimetry, 3J7*P*
in calculation of numbers of possible substitution products of hydrocarbons, 2A20
in clinical analysis, 1D1, 2A1*C*, 4A1*C*, 5A2*C*
report of symposium on, 2A2
in coulometric analysis, 2J143
in differential-scanning calorimetry, 2J160, 5A6*C*
in electron micro-probe analysis, 2J67, 6B200, 6J38
in electrophoresis, 5J19
in emission spectroscopy, 1J36, 2B63, 2J72, 6B32
in γ-spectrometry, 1B73, 5A5*C*
in g.c., 3D73, 4A18, 4J3, 4J32, 5J25
in g.c. - m.s., 1D3, 2A1*C*, 2A7*C*, 2A21, 5A1*C*, 5A2*C*, 6A1*C*
in h.p.l.c., 2E39
in i.r. spectrophotometry, 2J103, 5J64, 6H6, 6J61
in liquid chromatography, 3A10, 3J14
in liquid chromatography - m.s., 3J15
in liquid scintillation counting, 1J85
in m.s., 2C3, 2J117, 3A11, 3J76, 3J77, 5J80, 6A1*C*, 6H41
in n.a.a., 1B75, 1J86, 2H16, 4A19
in n.m.r. spectrometry, 2J105, 2J106, 5J66
in organic elementary analysis, 2E3
in particle size and shape analysis, 1J105, 1J106, 1J109, 5A7*C*
in pattern recognition, 6A19, 6A20
in polarography, 2B110
in potentiom. titrations, 3A8, 6A16, 6A18, 6B145, 6B147, 6B160
in protein anaysis, 4F19
in pyrolysis - g.l.c., 1C80
in radioactivation analysis, 1J86, 2J154
in Raman spectrometry, 4J56
in reflectance spectroscopy, 3G5
in studies of metal complexes, 5B16
in t.l.c., 3J27, 5J19
in voltammetry, 5J98

Computers, applications of—*continued*
in volumetric analysis, 1A11, 1J69
in X-ray diffractometry, 1A13
in X-ray emission spectroscopy, 1A1*C*, 2A1*C*, 2H4, 2J62, 3D7, 3J57, 4B17, 4B143
system for digitisation of photographically recorded data, 5J9
Conferences and symposia, reports of, Annual Meeting of the American Nuclear Society (1975), New Orleans, 6A3
British Pharmaceutical Conference (112th Meeting) (1975), Norwich, 4A2
Eighteenth Conference on Analytical Chemistry in Nuclear Technology (1974), Gatlinburg, 2A7
Fifteenth Meeting of the Scandinavian Society for Clinical Chemistry and Clinical Physiology (1975), Aarhus, 4A1
Fifth Annual Meeting of the Fine Particle Society (1974), Fort Lauderdale, 5A7
First International Symposium on Glass Capillary Chromatography (1975), Hindelang, 2A6
First National Meeting of the Federation of Analytical Chemistry and Spectroscopy Societies (1974), Atlantic City, 2A1
Forty-first American Society of Brewing Chemists Convention (1975), New York, 4A3
Fourth International Conference on Thermal Analysis (1974), Budapest, 5A6, 5J114
Fourth International Congress on Hormonal Steroids (1974), Mexico City, 2A3
Informal Symposium of the Chromatography Discussion Group (1973), London, 4A5
International Nuclear- and Atomic-Activation Analysis Conference and Nineteenth Annual Meeting of Analytical Chemistry in Nuclear Technology (1975), Gatlinburg, 5A5
International Symposium on Recent Advances in the Assessment of the Health Effects of Environmental Pollution (1974), Paris, 5A3, 5H46
Meeting of the Analytical Division of the Chemical Society on Applications of New Techniques in Environmental Analysis (1975), St. Andrews, 4A4
Seventh Annual Symposium on Advanced Analytical Concepts for the Clinical Laboratory (1975), Oak Ridge, 5A2
Sixteenth Session of International Commission for Uniform Methods of Sugar Analysis (1974), Ankara, 2F51*B*
Symposium: Chemistry, Occurrence and Measurement of Polynuclear Aromatic Hydrocarbons (1975), Chicago, 5A1
Symposium on Computer Applications in the Clinical Laboratory (1974), New Orleans, 2A2
Symposium on New Methods of Separation (1974), Los Angeles, 2A5
Symposium on Water Pollution Assessment: Automatic Sampling and Measurement (1974), Washington, D.C., 5A4, 5H47*B*
Symposium on Water Quality Parameters—Selection, Measurement and Monitoring (1973), Burlington, 2A4, 2H48*B*
Tenth International Symposium on Advances in Chromatography (1975), Munich, 6A1, 6J31
Third International Symposium on Isoelectric Focusing and Isotachophoresis (1974), Milan, 6A2, 6J32
Twentieth Annual Conference on Bio-assay, Environmental and Analytical Chemistry (1974), Cincinnati, 1A1
Twenty-first Annual ISA Analysis Instrumentation Symposium (1975), Philadelphia, 3A1, 3A14*B*
Coniine, detmn. in crude drugs, by TAS technique, 2E8
Convolvulus pluricaulis, identn. of fatty acids, fatty alcohols and hydrocarbons of, by t.l.c. - g.l.c., 3E18
Copolymers, analysis, by pyrolysis - g.c., 4C92
characterisation, by pyrolysis - g.l.c., with use of computer and external standard, 1C80
detection and detmn. of free monomers in aq. emulsions of, by g.c., 3C75
—, **acrylamide - 2-ethylhexanol,** detmn. of etherification levels in, by alcohol exchange - g.l.c., 2C76
—, **acrylamide - sodium 4-vinylbenzenesulphonate,** detmn. of free monomers in, polarogr., 3C81
—, **acrylonitrile,** detmn. of monomers in, by pyrolysis - g.l.c., 1C72
—, **acrylonitrile - styrene,** analysis, i.r. spectroph., changes in band parameters in, 5C57
—, **alkene - vinyl acetate,** identn., by pyrolysis - g.l.c. - m.s., 3C78
—, **butadiene,** detmn. of positions of butadiene linkages in, by ^{13}C n.m.r., 1C78
—, **butadiene - isoprene,** fractionation, liquid chrom., 6C94
—, **butadiene - styrene,** Curie-point pyrolysis - g.c. study of, 4C77
detmn. of styrene monomer in latices of, Raman spectrom., 2A1*C*
recommended procedures for characterisation of block, 1C79
—, **ethylene - propene,** detmn. of sequence length distribution of ethylene in, by pyrolysis - g.l.c., and of chemical heterogeneity in, gel chrom., 4C78
—, **glycidyl methacrylate - methyl methacrylate,** detmn. of carbonyl and epoxy-groups in, and of glycidyl methacrylate content of, i.r. spectroph., 3C77
—, **maleic anhydride - vinyl acetate,** detmn. of maleic anhydride in, automated potentiom., standards of known composition for, 5C56
—, **methyl methacrylate - styrene,** detmn. of polydispersity of block, gel chrom. - t.l.c. - pyrolysis - g.l.c., 1C73
—, **vinyl acetate - vinyl chloride,** detmn. of combined vinyl acetate in, by isotope dilution, 3C79
Copper, concn., by co-pptn. on $MnO(OH)_2$, 4B15
flotation method for, 1B36
liquid chrom., 2B14
detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
colour reaction for, 6A10
detection and detmn. in aluminium alloys, flame emission spectrom., 3B63
detmn., amperom., 4B14
anodic-stripping voltamm., 2B13
effect of Hg concn. in, 6B15
by a.a.s., 2J86
automated, 2J85
electrolytic pre-concn. method for, 6B8
extraction methods for, 3B11, 3B34
influence of line profiles on analytical curves for, 5B38
interferences in, 3B33
with use of micro-probe - flame - adapter atomiser, 3B7
with use of micro-sampling cup system, 1B15
with use of ultrasonic nebulisation, 3B13
by catalytic - ring-oven method, 4B6
by e.s.r., 2B19
by fluorim. titration, 1B27

opper, determination—*continued*
by ion exchange - X-ray photo-electron spectrom., 5B15
by kinetic - biamperom. method, 1B16
by n.a.a., 2J150
by proton activation, 3B20
by thermom. titration, 6B5
colorim. or spectroph., with use of reagent-impregnated polymer sheet, 3B12
complexom., comparison of titrants for, 4B10
indicators for, 1A6, 3B14, 6B4
coulom., 6C30
gravim., 1B25, 3B24, 5B40
interference arising in use of ion-exchange membranes in, 3B32
iodim., 4B23
indirect, 2B11
photom., indirect, 5B36
polarogr., 3B40
potentiom., 4B11, 5B14
ion-sensitive electrode for, 2J134
with silver - silver sulphide electrode, 1B10
reflectance spectroph., 5B37
spectroph., 1B29, 3B14, 3B35, 3B36, 3B37, 3B38, 3B39, 3B159, 4B24, 4B25, 4B26, 5B7, 5B35, 6B28
stripping chronopotentiom., 5B11
volum., 1B26
X-ray emission spectrom., pre-concn. method for, 3B15
with proton excitation, 1B6
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 3H6
in alkali-metal or barium halides, by m.s., 3B29
in aluminium, by a.a.s., 1B56
concn. methods for, 4B46
in aluminium alloys, potentiostatic method for, 4B49
in aq. soln., X-ray spectrogr., without use of standards, 4J40
in beer, by a.a.s., 3F32
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by activation analysis, 6A3*C*
by a.a.s., 3D8
in biol. materials in protein-bound form, by gel filtration - n.a.a., 3D11
in biol. tissues, by a.a.s., extraction method for, 3D14
in blood, by a.a.s., 3D9, 4D14
in blood serum, by a.a.s., 3D9, 5D5, 6J54
in boric acid, by electrolysis - spectrogr., 5B85
in boron carbide, X-ray spectrom., 4B42
in brain tissue, by a.a.s., 6D6
in cadmium, spectroph., 1B48
in cadmium sulphate, spectrogr., 5B78
in cadmium sulphide, anodic-stripping voltamm., 4B36
in cobalt alloys, a.c. polarogr., 6B213
in coins, by n.a.a., 6B44
in Cu - Fe - S sytems, X-ray spectrom., 2B20
in estuarine water, by ion exchange - a.a.s., 4H18
in filter-paper, by a.a.s., 4D4
in fish tissues, by a.a.s., 5F6
in foods, anodic-stripping voltamm., 2F1
inverse voltamm., 3F2
in germanium or germanium alloys, stripping voltamm., 6B126
in gold, spectroph., 4B31
in hair, by a.a.s., 6D4
in ilmenite, by a.a.s., 1B95

Copper, determination—*continued*
in lead silicate glasses, by a.a.s., 6B234
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in liver tissue, by a.a.s., 6D3
in materials for ferrite production, by n.a.a., 3B147
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in materials, ores or rocks, by a.a.s., 5B42
with direct introduction of powdered sample into flame, 5B217
by n.a.a., 4B22, 5B43
in mussels, by m.s., 4F1
in oxidation products of phosphorus, iodim. or photom., 5B137
in petroleum or petroleum products, by a.a.s., 6C65
by a.f.s., 5B5
in plants, by a.a.s., 6J54
comparison of acids in wet digestion methods for, 4D3
direct-reading emission spectrom., 2D5
spectrogr., 5D1
standards for, 2D4
X-ray emission spectrom., 3D7
in plutonium, by a.a.s., 2B67
in polyethylene, by a.a.s., 4D4
in presence of Bi, Cd or Pb, polarogr., 6B14
of Cr or Se, amperom., 2B116
of Co and Ni, by t.l.c. - reflectance spectroph., 5B41
spectroph., 5B44
of Au and Pd, spectroph., 1B172
of Fe, spectroph., 5B51, 6B209
of Fe and Ni, by ring-oven t.l.c. - spectroph., 4J15
of Mo, biamperom., 5B167
of Ni, amperom., 1B163
by h.p.l.c. of Schiff-base chelates, 5B47
of Ni and Zn, paper chrom. - spectroph., 6B10
of other elements, by t.l.c. - colorim., 2B15
of other transition metals, potentiom., with ion-sensitive electrode, 1B28
of Pd, spectroph., 4B164
of Zn, complexom., 5B39
in sea-water, by a.a.s., 5H22
with concn. at mercury thin-film electrode, 6H47
by isotope-dilution m.s., 1H27
in sediments, by a.a.s., 6H26
in situ X-ray emission spectrom., 6H25
polarogr., 5H24
X-ray spectrom., 1H26
in selenium, by a.a.s., 3B122
in sewage or sewage effluent, anodic-stripping voltamm., 1H29
in silicates, by ion exchange - a.a.s., 6B120
in skin, spectrogr., 4D2
in soil, by a.a.s., 1G4
comparison of extractants for, 3G6
in steel, by m.s., 4B144
emission spectrom., 1B144, 2B142, 4B145
with ion micro-probe, 2J111
X-ray emission spectrom., detection limits in, 5B195
in tin, by n.a.a., 5B124
in TiO_2-based pigments, by a.a.s., 1B95
in triuranium octaoxide or 'yellow cake', by a.a.s. or spectroph., 6B100
in uranium, by a.a.s., 2B67
in urine, by n.a.a., 4D6
X-ray spectrom., 1D5

Copper, determination—*continued*
in vanadium, spectrogr., 6B155
in vegetables, oscillopolarogr., 6G1
in water, 6H29
anodic-stripping voltamm., 1H29, 3H17
automated, 2H22
by a.a.s., 2H18, 2H21
automated, 6H40
by ion exchange - a.a.s., 1H28
by n.a.a., 2H16
collection on chelating-agent-loaded resin for, 5H18
concn. by co-pptn. on $Al(OH)_3$ for, 6H32
ion-exchange chrom. - a.a.s., 5H20
polarogr., 5H24
spectrogr., 5H19
X-ray fluorescence spectrom., concn. methods for, 2H19
in wine, X-ray emission spectrom., 3D7
in zinc sulphide, anodic-stripping voltamm., 4B36
of Al in, spectroph., 5B88
of Sb in, by co-pptn. on hydrated zirconium oxide - spectroph., 5B147
of Be in, by a.a.s., 3B61
of Bi in, by a.a.s., 2B32
of C in, by γ-activation, 6B216
of Co and Rh in, spectrochem., 4B28
of concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
of distribution of, in cadmium selenide films, by ion-beam etching - a.a.s., 1B49
of Au in, anodic-stripping voltamm., 5B48, 6B31
of Au, Ir, Pd, Pt and Ag in, by n.a.a., 5B52
of N in, by Kjeldahl distillation - coulom., 4B83
of O in, by ^{3}He-particle activation, 5B50
by H reduction - frontal g.c., 6B33
comparison of methods for, 5B155
of Pd and Pt in standard reference samples, by n.a.a., 6B36
of Se in, by a.a.s., 2B117
by g.l.c., 5B46
of Se and Te in, anodic-stripping voltamm., 1B31
of Ag in, by kinetic method, 5B45
of Ag distribution in, by ion bombardment - a.a.s., 2B31
identn. of corrosion products in thin layers on, with electron micro-probe, 2J66
i.r. emission spectrom. study of oxide films on surfaces of, 6B32
paper-chrom. study of, in butanol - HCl media, 6B30
sepn. from Ba, by ion exchange, 5B20
from Bi, Co, Mo and Ni, by t.l.c., 5B4
from Cd, with use of reagent-impregnated polyurethan foam, 4B27
from Cd, Co, In, Hg and Zn, by ion exchange, 1B2
from Cd, Co, Pb, Mn and Zn, ion-exchange chrom., 1B17
from Cd, Co, Pb, Ni and Zn, ion-exchange chrom., 1J11
from Ca and Mg, ion-exchange chrom., 6B63
from Co, Fe and Ni, by t.l.c., 1B19
from Co or Ni, by solvent extraction, 1B7
from highly saline matrices, by selective pptn., 6B12
from Fe, by ion exchange, 3B4
by solvent extraction, 1B136
by t.l.c., 2B136
from Fe, Ni, Pd and Zn, ion-exchange chrom., 2J18
from Fe, Ni and Zn, ion-exchange chrom., 1B17

Copper, separation—*continued*
from Hg, by solvent extraction, 6B67
extraction chrom., 6B64
from Ni and Pd, by h.p.l.c. of Schiff-base chelates, 6B18
from Ni and Zn, by g.l.c. of salicylaldimine-deriv. complexes, 3B23
from Os, Pt or Re, electroph., 1B167
from other elements, by solvent extraction, 6B29
ion-exchange chrom., 1B3
from Pd, by solvent extraction, 6B223
from Ti, by t.l.c., 3B95
solvent extraction of, with benzoic acid - butylamine (or pyridine), 6B9
with β-diketones, 1B7
with esters of dithiocarbamic acids, 4B2
with heptanoic acid in presence of aliphatic amines, 2B22
with *O*-isopropyl ethylthiocarbamate, 1B3
with metal dithiocarbamates, 5B1
sorption of, on $Al(OH)_3$, $Fe(OH)_3$ and $La(OH)_3$, 2B16

Copper, reagents for, *N*-(2-aminoethyl)-*N*-[(2-pyridylmethyleneamino)ethyl]dithiocarbamic acid, 4B26
4-amino-6-hydroxy-2-mercaptopyrimidine, 6A10
bis(di-isopropoxyphosphinothioyl) disulphide, 3D116
carminic acid, 5B37
3′,5′-dichloro-2-hydroxyacetophenone oxime, 1B25
diethyldithiocarbamic acid salts, 6B100
2,3-dihydro-6-phenyl-1,2,4-triazine-3-thione, 3B38
2′,4′-dihydroxyvalerophenone oxime, 5B40
dithio-oxamide, 3B37, 6B10
dithizone, 2B15, 4B31
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
hexanoic acid - pyridine, 5B51
1-hydroxy-3-methyl-1-phenyl-2-thiourea, 4B25
2′-hydroxy-4-methoxy-5′-methylchalcone, 3B24
2′-hydroxy-4-methoxy-5′-methylchalcone oxime, 4B164
2-hydroxy-1-naphthaldehyde - Girard T deriv., 5B44
3-hydroxy-3-phenyl-1-(3-pyridyl)triazen, 6B209
3-hydroxy-4-(2-thiazolylazo)naphthalene-2,7-disulphonic acid, 1B29
2-(2-hydroxy-3,5-xylylazo)-4-sulphobenzoic acid, 3B159
Pb xanthate, 3B35
pachycarpine - KI, 5B36
syn-phenyl 2-pyridyl ketoxime, 1B172
picolinaldehyde 2-quinolylhydrazone, 6B28
piperidine-1-carbodithioic acid, 5B35
poly-(8-hydroxy-5-vinylquinoline), 6B12
1-(2-pyridylazo)-2-naphthol, 3B12
1-(2-pyridylmethyleneamino)-2-naphthol, 3B39
Rhodamine B ethyl ester, 5B7
salicylic acid, 4B24
Se analogues of azolidines, 5B2
thiomaltol, 3B36
thiuram, 5B137

Copper alloys, see also *Brass*; *Bronze*
detmn. of Be in, by a.a.s., 3B61
of Ga in, spectroph., 4B44
of Tl in, inverse voltamm., 5B49
—, **Cu - Al,** detmn. of Fe in, polarogr., 2B135
—, **Cu - Be,** detmn. of Be in, spectroph., 2B42
—, **Cu - Au,** analysis, X-ray emission spectrom., with use of proton excitation, 6J41
—, **Cu - Ni,** detmn. of Al in, spectroph., 5B88
of Cu and Ni in coinage, gravim., 5B40

pper complexes, with acetylacetone, gel-chrom. study of, 3B20
with aliphatic hydroxamic acids, 6A8
with 2,2′-dichlorodithizone, 5A9
with (—)-hydroxyproline, polarogr. study of, 1B30
with mono- and di-hydrazones of benzil and 2,2′-pyridil, 5A10
with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
pper ferrate, X-ray photo-electron studies of, 6B212
pper(II) hydroxide, X-ray photo-electron studies of, 6B212
pper ores, control of pulps used for flotation of, 6B37
detmn. of Cu in concentrates or mattes of, by a.a.s., 5B42
of Cu and Zn in concentrates of, complexom., 5B39
of Au in, anodic-stripping voltamm., 5B48
of Ir in Ni-containing, by n.a.a., 3B42
of Pd in Ni-containing, colorim., 6B222
of Re in, photom., 6B191
of Ag in, by kinetic method, 5B45
identn., with electron micro-probe, 2J66
pper oxides, detmn. of Ag in, by kinetic method, 5B45
X-ray photo-electron studies of, 6B212
pper salts, detmn. in aq. soln., by β-ray back-scattering, 5B18
of Se in, by g.l.c., 5B46
pper sulphide, analysis of thin layers of non-stoicheiometric, 6B34
detmn. in faeces, by a.a.s., 5D6
proporphyrins, sepn. and detmn. of isomers I and III of, in urine, by t.l.c. - spectroph. (or fluorim.), 2D133
prostanol, detmn. in water, with cholesterol, by g.l.c. of trimethylsilyl deriv., as indication of faecal pollution, 1H40
rdanum, see *Talinolol*
rn oil, analysis of diacylglycerols in, by g.l.c. of trimethylsilyl deriv., 4F35
ronene, sepn. from other hydrocarbons, by h.p.l.c., 2J10
rticosteroids, detmn. in presence of clioquinol, partition chrom. - u.v. spectroph. or colorim., 1E40
fluorescence reactions of, 4D51
sepn., by t.l.c., 1J18
paper chrom., 3D84
of blood-plasma, automated liquid chrom., 1D58
, 17-hydroxy-, detmn. in urine, colorim., 1D31
rticosterone, fluorescence reaction of, 1E17
protein-binding study of, 6D52
, 11-deoxy-, sepn. from progesterone, liquid chrom., 6D51
rtisol, see *Hydrocortisone*
rtisone, detmn., spectroph., 3E26
protein-binding study of, 6D52
rtone, deoxy-, acetate, detmn. in pharmaceutical preparations, complexom., 1E18
rundum, detmn. of Cr, Mn, Na, Ti and V in, by n.a.a., 4B49
smetics, bibliographies, 2F43, 5F60
detection and detmn. of alcohols in materials for, by h.p.l.c., 2C14
detmn. of Pb in iron oxide for use in, by a.a.s., 3C67
of preservatives in, partition chrom. - u.v. spectroph., 4C64
lipstick, extraction and identn. of colours used in, review, and scheme for, 6C75
Cotinine, detmn. in urine, by t.l.c. - spectroph., 3D31
Cotton, detmn. in blends with Acrilan fibres, i.r. spectroph., 5C52
Cottonseed, detection of aflatoxins in, sampling for, 2G14
detmn. of folpet on, indirect polarogr., 1G18
of Omite in, by g.l.c., 1G22
of thiofanox and its metabolites in, by g.l.c., 5G36
Cottonseed meal, detection of aflatoxins in, fluorescence reaction for, 5F14
detmn. of available lysine in, ion-exchange chrom. - spectroph., 2G9
Cottonseed oil, detmn. of amide- or amine-N in, by acidic extraction - Kjeldahl method, 3F50
Cottonseed products, detmn. of aflatoxins in, collaborative study of simplified AOAC method for, 2G15
with use of Zn acetate for extract purification, 2F22
Coulometric analysis, 6A22*B*
detmn. of inorg. compounds by direct, review, 6J72
indirect, review, 5B12
***p*-Coumaric acid,** identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
Coumarin, detection in cinnamon, as indication of adulteration, by t.l.c., 6E20
Coumoestrol, detmn. in dried lucerne or in lucerne leaf protein concentrates, paper chrom. - fluorim., 4G14
Cream, detmn. of fat in, 5F29
of lactic acid in, spectroph., 5F31
Creatine kinase, see under *Enzymes, specific*
Creatine phosphokinase, see under *Enzymes, specific*
Creatinine, detmn. in blood serum, correction for turbidity in, 1D1
Creosote, sepn. and detmn. of heterocyclic and polycyclic compounds in, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
***m*-Cresol,** detmn. in tobacco-smoke condensate, with *p*-cresol, by t.l.c. - g.l.c. and g.l.c. - m.s., 5D40
***p*-Cresol,** detmn. in tobacco-smoke condensate, with *m*-cresol, by t.l.c. - g.l.c. and g.l.c. - m.s., 5D40
—, **2,6-di-t-butyl-,** detmn. in fats and fatty oils or in feeding-stuffs, by distillation - g.l.c., 4G11
—, **6-mercapto-, derivatives,** reactions with cations of, 4B4
Cresols, detmn. in sewage effluent or water, by g.l.c. of trimethylsilyl deriv., 6H44
Crops, see *Plants*
Crotamiton, detmn. in technical product, i.r. spectroph., 5E44
Cryolite, detmn. of F in, by aq. $AlCl_3$ attack - potentiom., with ion-sensitive electrode, 4B127
of Na in, by ion exchange - volum., 1B58
Cumene, detmn. of cumene hydroperoxide in, densitom., 5C29
Cumene hydroperoxide, detmn. in cumene, densitom., 5C29
Curium, detmn. in chemical-processing plant waste, 2A7*C*
of Am in, spectrogr., 6B108
sepn. from Am and rare-earth metals, liquid chrom., 6B107
from Ce, Eu and Y, ion-exchange chrom., 2B72
solvent extraction of, from HNO_3 soln. with alkylene and vinylene deriv. of phosphine oxide, 1B79, 6B106
Custard apple, see Anona muricata

Cyanide, detmn., by chemiluminescence method, 5B115
by indirect tensamm. titration, 6B109
indirect polarogr., 6B110
oscillopolarogr., 6B111
spectroph., 2B12, 4B64
stable reagents for, 1B82
in industrial wastes, 2A4*C*
spectroph., 2H29
with use of edta for complex decomposition, 2H30
in water, potentiom., with ion-sensitive electrode, 6H30
Cyanophos, detmn. in rice or other plants, by g.l.c., comparison of extraction methods for, 5G34
Cyanuric acid, detection, by t.l.c., 2C24
Cyclamate, detection in pharmaceutical preparations, by t.l.c., 6E43
detection and detmn. in foods or pharmaceutical preparations, by t.l.c. - spectroph., 5F40
detmn., by g.l.c., as *N*-heptafluorobutyrylcyclohexylamine, 3E15
by g.l.c. of *N*-trifluoroacetyl deriv., 2F39
Cyclic 3′:5′-nucleotide phosphodiesterase, see under *Enzymes, specific*
Cyclitols, paper-chrom. study of, 6D2
Cycloalkanes, g.l.c. study of, 3C7
Cyclobarbitone, detmn. in presence of other barbiturates, by t.l.c. - u.v. spectroph., 6D18
Cyclobutane, 1,2-dimethyl-, detmn. of *cis-* and *trans-*, in products of reaction of but-2-ene with ethylene, by g.c., 6C14
Cyclobuta[*cd*]pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6-dodecachloro-octahydro-1,3,4-metheno-1*H*-, see *Mirex*
Cyclododeca-1,5,9-triene, analysis of hydrogenation products of, by g.l.c., 6C39
sepn. of isomers of, liquid chrom., 6C17
Cyclohexa-2,5-dienone, 2,4,4,6-tetrachloro-, formation of chlorophenols during g.l.c. and g.l.c. - m.s. of, 5C11
Cyclohexane, sepn. from cyclopentane, by g.c., 3J35
—, **1-ethyl-4-isopropyl-,** sepn. of *cis-* and *trans-* isomers of, by circulatory g.l.c., 1C31
Cyclohexane derivatives, g.l.c. study of, 3C31
Cyclohexanecarboxylic acid, *trans*-4-aminomethyl-, see *Tranexamic acid*
Cyclohexane-1,3-diamine, sepn. of stereoisomers of, by g.l.c., 1C40
Cyclohexane-1,4-diamine, sepn. of stereoisomers of, by g.l.c., 1C40
Cyclohexanol, detmn. in presence of benzene and pentanol, by partial extraction - refractom., 5C3
—, **4-amino-,** sepn. of stereoisomers of, by g.l.c., 1C40
Cyclohexanone, detmn., conductim., 5C4
square-wave polarogr., 2C39
Cyclohex-3-ene-1-carboxylic acid, 1,3-dimethyl-, methyl ester, sepn. of isomers of, by circulatory g.l.c., 1C31
Cyclohexylamine, detection and detmn. of bound, in polyamide, German official method for, 4F11
—, **2-ethyl-,** sepn. of stereoisomers of, by g.l.c., 1C40
—, **4-ethyl-,** sepn. of stereoisomers of, by g.l.c., 1C40
—, **4,4′-isopropylidenebis(-,** sepn. and detmn. of *N*-(dimethylaminomethylene) deriv. of, 4C36
—, **4,4′-methylenebis(-,** sepn. and detmn. of *N*-(dimethylaminomethylene) deriv. of, 4C36
Cyclopentane, sepn. from cyclohexane, by g.c., 3J35
Cyclopentane derivatives, g.l.c. study of, 3C31
Cyclopentanol, 3-t-butyl-, sepn. of *cis-* and *trans-* isomers of, by circulatory g.l.c., 1C31
Cyclopenta[*cd*]pyrene, identn. in carbon-black adsorbates, scheme for, 1H21
Cyclophosphamide, detmn. in urine, with its metabolites, by t.l.c. - spectroph., 3D46
Cyclophosphazene derivatives, alkoxy-, g.l.c. study of, 4C51
—, **chloro-,** sepn. of oligomers of, by t.l.c., 3B104
Cyclopropanecarboxylic acid, *trans*-(+)-3-cyclopentylidenemethyl)-2,2-dimethyl-, (5-benzyl-3-furyl)methyl ester, see *Bioethanomethrin*
Cycloserine, detmn., by chemiluminescence method, 5E4
Cyclosiloxane derivatives, dimethyl(methyldichorophenyl)-, sepn. and identn., by g.l.c. - m.s., 6C90
Cyclotrimethylenetrinitramine, see 1,3,5-*Triazine, hexahydro*-1,3,5-*trinitro-*
Cypendazole, detmn. in aq. suspension, colorim., 4G26
Cystamine, sepn. from other amines and thiodiamines, automated ion-exchange chrom., 1D61
Cystathionamine, sepn. from other amines and thiodiamines, automated ion-exchange chrom., 1D61
Cysteine, detmn., by chemiluminescence method, 5E4
photom., 5D70
potentiom., 6C32
—, ***S*-carboxymethyl-,** detmn. in urine, with use of amino-acid analyser, 5D36
Cystine, detection, colour reaction for, 6D64
— **bis[bis-(2-chloroethyl)hydrazide],** detmn., spectroph., 2E45
Cytidine, detmn. in malt wort, by h.p.l.c., 1F15
—, **5-fluoro-,** detmn. in RNA hydrolysates, by h.p.l.c., 3D107
Cytochrome *c*, detmn., gel electroph. - spectroph., 2D119
of mercapto-groups in, amperom., 5D75
sepn. from dodecyl sulphate and buffer ions, by gel filtration, 2D120
Cytochrome P-450, detmn. in liver tissue or on microsomes or mitochondria isolated therefrom, by e.s.r., 2D125
Cytokinins, sepn., by h.p.l.c., 1G12
Cytosine, detmn., coulom., 2D137
Cytosine derivatives, detmn., coulom., 2D137

D

2,4-D, detmn. in cereals or soil, in presence of dicamba and mecoprop, by g.l.c. of methyl ester, 4G22
in plants, by t.l.c. of methyl deriv. - g.l.c. of hydrogenation product, 1D35
in wheat, by g.l.c. of ethyl ester, 3G23
of amine salts of, by g.l.c. of corresponding amides, 5G27
of free and bound, in barley, by g.l.c. of methyl deriv., 2G20
DDE, detection and detmn. in tinctures or extracts, by t.l.c., 4E47
DDT, detection and detmn. in tinctures or extracts, by t.l.c., 4E47
detmn., by g.l.c., 4J31
in cereals or milk, by t.l.c., clean-up procedures for, 3F21
in soil, by g.l.c., photochem. induced artefact in, 5G31
in water, by t.l.c., with concn. on DDT-specific sorbent, 5H38

DT, determination—*continued*
of ^{14}C-labelled, in sea-water or marine suspended matter, by liquid scintillation counting, 6H52
IA, see *Nucleic acids, deoxyribo -*
idzein, sepn. from other oestrogens, gel chrom. - paper chrom., 4D48
iry products, see also *Butter*; *Cheese*; *Cream*; *Ice-cream*
detmn. of polybrominated biphenyls in, by u.v. irradiation - g.l.c., 5G19
gel chrom. - g.l.c. or by t.l.c., 4F24
psone, identn. and detmn. of impurities in, by h.p.l.c. - fluorim., 2E43
***itura* alkaloids,** detection in feeding-stuffs or foods, by t.l.c., 1F5
cane, detection and detmn. in hexane, 3C8
canoic acid, detmn. in beer, by g.l.c., 1F16
ethyl ester, detmn. in beer, by g.l.c., 1F16
c-2-ene, sepn. of geometrical isomers of, liquid chrom., 6C17
hydroascorbic acid, detmn. in feeding-stuffs or foods, with ascorbic acid, spectroph., 5F72
hydroepiandrosterone, detmn. in blood plasma, by g.l.c., 5D58
kalin, perfluoro-, detmn. in biol. fluids or tissues, by g.l.c., 2D49
, perfluoro-1-methyl-, detmn. in biol. fluids or tissues, by g.l.c., 2D49
missine, sepn. from other potato glycoalkaloids, by g.l.c. of permethyl deriv., 1G3
oxycorticosterone, 18-hydroxy-, sepn. and characterisation of reduced metabolites of, by g.l.c. - m.s., 6A1*C*
oxyribonuclease, see *Enzymes, specific,* DNase
rmatan sulphate, sepn. from other arterial-wall mucopolysaccharides, electroph., 3D57
sipramine, detmn. in blood plasma, by g.l.c. - m.s. of *N*-acetyl deriv., 4D25
in brain tissue, radiom., 5D24
smetryne, detmn. in medicinal plants, by t.l.c., 1G13
tergents, see *Surfactants*
uterium, detmn. in hydrogen, Raman spectrom., 3B25
in water, by photon activation, solid-state track detectors for, 3B26
uterium oxide, detmn. in heavy water, by isotope exchange - m.s., 4B20
xtromethorphan, detmn. in pharmaceutical preparations, by g.l.c., 1E45
xtropropoxyphene, detmn. in blood plasma, by g.c., 4A1*C*
alysis, apparatus for use with small vol. of soln., 2J9
amines, detmn. in urine, by g.l.c. of pentafluorobenzoyl deriv., 6D54
sepn. of aromatic, by g.c., 3J34
amond, detmn. of B, C, N and O in, with electron micro-probe, 3B19
of N distribution in, by charged-particle activation, 5B116
amorphine, characterisation of samples of, by g.l.c., 2E50
detection and detmn. of strychnine in illicit preparations of, by t.l.c. and spectroph., 6E5
detmn. in urine, with its metabolites, by g.l.c., 2D27
of adulterants and impurities in illicit samples of, by g.l.c., 5E11
anabol, see *Methandienone*
azepam, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
spectroph., 4E34
Diazepam, determination—*continued*
in presence of its decomposition products, by t.l.c. - spectroph., 5E34
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
Diazinon, detection and identn., by t.l.c., 4G35
detmn. in biol. tissues or plants, by micro sublimation - u.v. spectroph., 6D36
in vegetables, by g.l.c., avoidance of interference by S compounds in, 2G30
Dibenzo[*ad*]cyclohepta-1,4-diene, 3-allylidene-, identn. in amitriptyline hydrochloride, by t.l.c., 4E35
—, 3-(2-oxoethylidene)-, identn. in amitriptyline hydrochloride, by t.l.c., 4E35
Dibenzo[*a,c*]cycloheptene derivatives, identn., by n.m.r., 4E9
Dibenzo-1,4-dioxin, octachloro-, detmn. in pentachlorophenol, by g.l.c., interference by 2,5-HCP in, 4G24
Dibenzo-1,4-dioxin derivatives, chloro-, detmn. in pentachlorophenol, by g.l.c., comparison of methods for, 6G8
sepn. and identn. of isomeric, by g.l.c. - m.s., 6C58
Dibenzofuran, computerised calculation of number of possible Cl-substitution products of, 2A20
Dibenzofuran derivatives, chloro-, detection in polychlorinated biphenyls, liquid chrom. - g.l.c. - m.s., 3C92
g.l.c. study of, and identn. in polychlorinated biphenyls, 6C99
Dibenzosuberone, identn. in amitriptyline hydrochloride, by t.l.c., 4E35
Dibenz[*b,e*][1,4]oxazepine-5-carboxamide, 7-chloro-5,11-dihydro-, detmn. in blood plasma or blood serum, by g.l.c. of corresponding nitrile, 3D37
Dibucaine, see *Cinchocaine*
Dibutylamine, perfluoro-*N*-methyl-, detmn. in biol. fluids or tissues, by g.l.c., 2D49
Dicamba, detmn., by g.l.c. of 2-chloroethyl ester, 5G26
in cereals or soil, in presence of 2,4-D and mecoprop, by g.l.c. of methyl ester, 4G22
Dichloralphenazone, detmn. in presence of paracetamol, spectroph., 4E29
Dichlorprop, detmn. of free and bound, in barley, by g.l.c. of methyl deriv., 2G20
Dichlorvos, detmn., with its metabolites, colorim., stability of soln. used in, 3G40
in presence of trichlorphon, by g.l.c., 3G41
in rice or other plants, by g.l.c., comparison of extraction methods for, 5G34
Dichroism, compounds for use in calibration in measurements of circular, 2J121, 2J122
Dichromate, detmn., polarogr., 3B127
Diclofenac, detmn. in blood plasma, blood serum or urine, or in aq. soln., by g.l.c., as corresponding indolone, 4D27
Dicloran, detmn. in lettuce or soil, by g.l.c., 2G23
Dicofol, detmn. in fruit or vegetables, by h.p.l.c., 2G29
Dicoumarol, detmn. of metabolites of, in bile, paper-electroph. sepn. method for, 2D45
Didropyridine, see *Pyrithyldione*
Dieldrin, detection in wood, by t.l.c., 3C70
Diethazine, see *Phenothiazine,* 10-(2-*diethylaminoethyl*)-
Diethirimol, sepn. from 2-aminobenzimidazole, benomyl, ethirimol and methyl benzimidazol-2-ylcarbamate, by t.l.c., 3G26
Diethylamine, detmn., colorim., 3C22
in air, by equilibrium-concn. method, 6H15
—, *N*-nitroso-, detmn., by g.l.c., 4F5

Diethylamine—*continued*
—, **perfluoro-*N*-cyclohexyl-,** detmn. in biol. fluids or tissues, by g.l.c., 2D49
Diethylene glycol, detmn. in propane-1,2-diol, spectroph., 3C10
in presence of other polyols, by g.l.c., 3C74
Digitoxin, detmn., differential pulse polarogr., 3E14
Digoxin, detmn., differential pulse polarogr., 3E14
fluorim., 1E10
in injections, non-selectivity of methods for, 4A2*C*
Di-isobutylamine, detmn. in presence of amino-acids and NH_3, spectroph., 2D85
Dimercaprol, detmn., by chemiluminescence method, 5E4
Dimethoate, detmn. in foods, by t.l.c. - spectroph., 3F24
Dimethylamine, detmn. in dimethylformamide, potentiom., 4C95
in fish, fish products or other foods, by g.l.c., 3F10
in presence of methylamine and trimethylamine, ion-exchange chrom., 5J17
—, ***N*-nitroso-,** detmn., by g.l.c., 4F5
by h.p.l.c., 2F14
differential pulse polarogr., 4F7
in cured meats and related products, by g.l.c. - m.s., 2F15
in fish-meal, by g.l.c. - m.s., 4G17
Dinitolmide, detmn. in feedstuffs and pre-mixes, spectroph., 2G17
Dinoterb, detmn. in soil, by g.l.c. of methyl ether, 5G28
Diols, detmn. in flavour bases or flavoured wines, by g.l.c., 5F39
of dithia-alkane-α,ω-, coulom., 5C20
of *vic*-, by automated kinetic - potentiom. method, 1C22
Diospyrin, t.l.c. study of, 6C53
1,3-Dioxan, 4,4-dimethyl-, detmn. in air, 6H19
Dipeptidase, see under *Enzymes, specific*
Diphenhydramine, detmn., by oxidation - g.l.c., 4E6
in biol. fluids, u.v. spectroph., 3D43
Diphenylamine, detmn., voltamm., with use of passivated hanging-mercury-drop electrode, 5C33
—, **2-nitro-,** identn. in smokeless powders, by t.l.c., 1C85
—, **4-nitro-,** identn. in smokeless powders, by t.l.c., 1C85
—, ***N*-nitroso-,** as indicator for cerimetry, 4A13
identn. in smokeless powders, by t.l.c., 1C85
Diphenylpyraline, detmn. in urine, with its metabolites, by t.l.c. - u.v. spectroph., 5D31
Diphosphorous acid dialkyl esters, detmn., by g.l.c., 1C29
Dipipanone, identn., by t.l.c., 3E4
Dipropylamine, detmn. of H_2O in, conductim., 4C3
Dipyrone, detmn., by chemiluminescence method, 5E4
spectroph., 3E33, 3E34
in pharmaceutical preparations, by t.l.c. - spectroph., 5E32
photom., 3E32
in pharmaceutical preparations containing ascorbic acid, gravim., 3E31
Disaccharides, sepn., by h.p.l.c., 3C12
Diselenide, dimethyl, detmn. in air, by g.c. - a.a.s., 6H18
Disopyramide, detmn. in blood serum, by g.l.c., 2D41
Dissolution, sealed-reflux system for, 2A7*C*, 2J2
Distillation, still-head for use in Kjeldahl detmn., 3J8
Disulphide groups, detmn. in peptides, spectroph., 2D115
Disulphides, organic, g.l.c. study of, 3C26
—, **dimethyl,** detmn. in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
by g.l.c., 5H8
Dithionic acid, detmn., by t.l.c., 3B121
Diumycin, detmn., by t.l.c. - spectroph., 6E14
DNase, see under *Enzymes, specific*
Dodecalactam, detmn., potentiom., 3C83
δ-Dodecalactone, identn. and detmn. in ripening blue cheese, by g.l.c., 5F32
Dodecanoic acid, detmn., liquid chrom., chromogenic reagent for, 4C21
in beer, by g.l.c., 1F16
—, **3-methyl-,** identn. of isomeric acids in, by g.l.c., 6F28
Dodecyl sulphate ion, detmn., potentiom., ion-sensitive electrode for, 5J94
Dolomite, detmn., thermogravim., 5A6*C*
in coal, by d.t.a., 4B170
in soil, deriv. thermogravim., 5A6*C*
of Ca in, X-ray emission spectrom., 5B218
Dopamine, detmn., spectroph., 1D62
in urine, by a.a.s. or radiom., 1D60
liquid chrom. - fluorim., 6D55
identn. of product of reaction with methyltetrahydrofolic acid of, by radio - g.l.c., 6D57
Dopamine β-hydroxylase, see under *Enzymes, specific*
Dopamine β-monooxygenase, see under *Enzymes, specific*
Dothiepin chloride, identn., by t.l.c. or u.v. spectroph., and detmn., potentiom., 2E29
Drugs, analysis, applications of m.s. in, review, 6J63
by h.p.l.c., with use of combined u.v. - fluorescence detection, 4E32
of metabolites of, by g.c., with use of glass capillary columns, 2A6*C*
detection in blood or urine, by g.l.c., 1D17
of commonly abused, in urine, scheme for, 3D28
of synthetic psychotropic, in biol. materials, thin-layer electroph., 1D21
detmn., by t.l.c., with *in situ* scanning, 4A1*C*
potentiom., application of Gran graphical method for, 3E5
u.v. spectroph., differentiation of true and false max. in, 1E2
in biol. fluids, by m.s., 6D26
with their metabolites, use of ion-pair extraction in, review, 2D25
in blood serum, by e.s.r., 5A2*C*
of As and Pb in, by a.a.s., 4E2
of basic, by g.c., choice of stationary phase for, 4A5*C*
fluorim., 6E25
of C, H and N in, or in binary mixtures of, by oxidation - g.s.c., automated, 2E3
of cardioactive, in blood plasma, 4A1*C*
of primary amines, fluorim., 2A1*C*
differential-scanning-calorim. study of, 5A6*C*
extraction from biol. materials, with use of Amberlite XAD-2 resin, 1D18
of lipophilic, with low-density org. solvents from biol. fluids or aq. soln., 6D15
identn., by chemical-ionisation m.s., 4E31
thermo-microsc., 5E3
in pharmaceutical preparations, by 'double-titration' method, 2E1
of basic, by t.l.c., standardisation of system for, 3E4
of psychotropic, by n.m.r., 4E9

ugs—*continued*
ratio of concn. of, in blood and vitreous humour, as indication of time elapsing between administration and death, 5D16
sepn., by g.c., derivatisation for, review, 5J27
of acidic and neutral, by h.p.l.c., 3E2
of commonly abused, by h.p.l.c., 3E1
of thiazide diuretics and antihypertensive, by t.l.c., 6E37
sepn. and detmn., ion-exchange chrom., 3E3
u.v.-spectroph. methods in control of, 4E8
***uboisia* spp.,** detmn. of hyoscine and hyoscyamine in leaves of, by g.l.c., 6E7
ulcin, detection in pharmaceutical preparations, by t.l.c., 6E43
ulcitol, sepn. from other polyols, by t.l.c. or paper chrom., 3C11
urene, sepn. from 1,2,3,5-tetramethylbenzene, by circulatory g.l.c., 1C31
ust, atmospheric, see also *Aerosols*
analysis, physical micro-methods for, review, 4H1
collection of 'foliar', 1H22
detmn. in air, correlation between methods for, 6H2
of Sb, Br, Co, In and U in, by n.a.a., 6H5
of benzo[*a*]pyrene in, by g.l.c., 3H13, 5A1*C*
by t.l.c. - fluorim., 4H16
of Be in, by a.a.s., 2H6
of Br and Pb in, X-ray emission spectrom., 4H3
of Cd, Pb, Ni, Sn, Ti, V and Zn in, spectrogr., 1H3
of elements in, by a.a.s., 2H7, 4A4*C*
by n.a.a., 2H4, 5A5*C*
comparison of methods for, 2H3
emission spectrom., 2A7*C*, 4H4
spectrogr., 3H5, 3H6
X-ray emission spectrom., 5D3
absorption correction for, 5H2
with use of dichotomous sampler, 2H4
of elements in urban- and rural-area, by n.a.a., 1H5
of hydrocarbons and metals in, by m.s., 6H4
of Fe in, by g.l.c. of trifluoroacetylacetonate, 4H12
of isomeric polycyclic hydrocarbons in, by t.l.c. - fluorim., 4H15
of Pb in, by a.a.s., 3H8, 5H5
of malathion in, by g.l.c., 6H23
of Hg in, by a.a.s., sampler for, 3H7
of non-volatile org. compounds in, i.r. spectroph., 5H11
of org. C in, solvents for extraction in, 1H15
of petroleum-pitch volatiles in, by g.l.c. - u.v. spectroph., 6H20
problems in benzene Soxhlet extraction method for, 3H14
of α-quartz in, i.r. spectroph. or X-ray diffractom., 1H9
of RDX and TNT in, by g.l.c., 6H22
of S in, flame photom., 6H11
of Te and U in, by n.a.a., 3D22
of V in, by a.a.s., 6H9
identn. of principal component of street, with electron micro-probe, 2J66
particle size and shape analysis, by electron microscopy, computerised technique for, 1J106
radioactive monitoring of, 6A3*C*
sampling and analysis of pollutants in, 5A3*C*
yes, analytical applications of thiazolylazo-, review, 6A5
bibliography of electroph. studies of, 5J20
detmn. of anthraquinone-derived chlorotriazine, potentiom., 5C49
extraction and identn. in lipstick, review, and scheme for, 6C75

Dyes—*continued*
for foods, identn. and detmn. of primary aromatic amines in H_2O-sol., by t.l.c., 2F34
identn. of natural, on old textile materials, by t.l.c., 4C67
nitrophenoxazine, as acid - base indicators, 3A7
sepn. and detmn. of azo- and anthraquinone, and of intermediates, by h.p.l.c., 4C65
t.l.c. study of, 5C48

Dyes, listed under commercial or common names, with corresponding Colour Index (Third Edition) designations, under which references will be found
Acid Chrome violet K. *Mordant Violet* 5
Amaranth. *Food Red* 9
Amido black 10B. *Acid Black* 1
Astrazone blue B. *Basic Blue* 5
Azure A. *No.* 52005
Azure B. *No.* 52010
brilliant cresyl blue. *No.* 51010
Brilliant green. *Basic Green* 1
butylrhodamine B. *Basic Violet* 10 *butyl ester*
carminic acid. *Natural Red* 4
Chrome Azurol S. *Mordant Blue* 29
Chrysoin S. *Acid Orange* 6
Coomassie blue GL. *Acid Blue* 102
Coomassie brilliant blue R. *Acid Blue* 83
crystal violet. *Basic Violet* 3
dimethyl yellow. *Solvent Yellow* 2
Eriochrome Azurol B. *Mordant Blue* 1
Eriochrome black T. *Mordant Black* 11
Eriochrome blue SE. *Mordant Blue* 13
Eriochrome cyanine R. *Mordant Blue* 3
Eriochrome red B. *Mordant Red* 7
ethyl violet. *Basic Violet* 4
F D & C Yellow No. 5. *Food Yellow* 4
F D & C Yellow No. 6. *Food Yellow* 3
Fast blue salt B. *Azoic Diazo Component* 48
Fast dark blue R salt. *Azoic Diazo Component* 51
Fast red E. *Food Red* 4
Fast red salt B. *Azoic Diazo Component* 5
Fast yellow. *Food Yellow* 2
gallein. *Mordant Violet* 25
gallocyanine. *Mordant Blue* 10
malachite green. *Basic Green* 4
methylene blue. *Basic Blue* 9
Nile blue. *Basic Blue* 12
Orange GGN. *Food Orange* 2
Ponceau 6R. *Food Red* 8
Procion brilliant blue RS. *Reactive Blue* 4
pyrogallolphthalein. *Mordant Violet* 25
Rhodamine B. *Basic Violet* 10
Rhodamine 6G (or 6Zh). *Basic Red* 1
Rose Bengal. *Acid Red* 94
safranine T. *Basic Red* 2
Scarlet GN. *Food Red* 2
Solochrome Black 6B. *Mordant Black* 3
Solochrome cyanine R. *Mordant Blue* 3
Sudan red. *Solvent Red* 23
Sunset yellow FCF. *Food Yellow* 3
tartrazine. *Food Yellow* 4
Titan yellow. *Direct Yellow* 9
toluidine blue O. *Basic Blue* 17
Victoria Pure blue BO. *Basic Blue* 7
Water blue. *Acid Blue* 22

Dyes, listed under designations in the Colour Index (Third Edition)
No. 51010, as reagent for Tl, 4B53
as redox indicator, 1A5
No. 52005, as reagent for anionic surfactants, 3H42
t.l.c. and spectroph. study of, 1C65
No. 52010, t.l.c. and spectroph. study of, 1C65

Dyes, listed under designations in the Colour Index —*continued*
Acid Black 1, as reagent for proteins, 2D123, 3D106
Acid Blue 22, as reagent for heparin, 5D39
Acid Blue 83, as reagent for proteins, 2D119
Acid Blue 102, as reagent for proteins, 1D78
Acid Orange 6, identn., by t.l.c. and paper chrom., 4F21
Acid Orange 12, as reagent for org. N, 1G9
for proteins, 2F29
Acid Red 94, as adsorption indicator, 2E6
as reagent for Cd and Zn, with 1,10-phenanthroline, 5B69
for use in photochemical analysis, 1E3
Azoic Diazo Component 5, as reagent for bitter principles of gentian, 3E16
Azoic Diazo Component 48, as reagent for eugenol, 6E20
Azoic Diazo Component 51, as reagent for oestriol, 5D57
Basic Blue 5, as reagent for In, 4B52
Basic Blue 7, as reagent for In, 3B66
Basic Blue 9, as reagent for aromatic carboxylic acids, 2C41
for H_2S, 2B25
for Mo, 2B26
for Na dodecyl sulphate, 2D122
for BF_4^-, 3H20
for use in photochemical analysis, 1E3
Basic Blue 12, as indicator for cerimetry, 1A4
as reagent for saponins, 3E13
Basic Blue 17, sepn. from 3-amino-2-methyl-7-(methylamino)phenothiazine and 2-methylthionine, by t.l.c., 4C66
Basic Green 1, as reagent for Ge, with 3,5-dinitrocatechol, 5B143
for Hg and Ag, 2B34
for Sn, 4B74
Basic Green 4, as reagent for Ag, 3B44
for U, 6B96
Basic Red 1, as reagent for Ge, with alizarin complexan, 6B122
for Re, 6B190
for Sn, 1B32
Basic Red 2, as reagent for aromatic carboxylic acids, 2C41
for Re, 6B190
Basic Violet 3, as reagent for Sb, 5B147
for Cd and Zn, with I^- or SCN^-, 5B70
for quinol, 4C31
for W, with SCN^-, 6B182
for V, with 4-(2-pyridylazo)resorcinol, 4D11
Basic Violet 3 leuco-form, as reagent for I^- and I, 1B128
Basic Violet 4, as reagent for Ag, 6B40
Basic Violet 10, as reagent for Ga, 4B31
for Au, 6B49
for Lu, with 8-hydroxy-5,7-di-iodoquinoline, 1B67
for Re, 4B136, 6B190
for Tl, 5B120
Basic Violet 10 butyl ester, as reagent for Re, 6B190
for Te, 4B19
Basic Violet 10 ethyl ester, as reagent for Sb, Cu, Au, In, Hg, Pt, Ag, Te and Tl, 5B7
Direct Yellow 9, as reagent for Mg, 4B33
Food Orange 2, identn., by t.l.c. and paper chrom., 4F21
Food Red 2, identn., by t.l.c. and paper chrom., 4F21
Food Red 4, detmn., polarogr., 2F35

Dyes, listed under designations in the Colour Index —*continued*
Food Red 8, identn., by t.l.c. and paper chrom., 4F21
Food Red 9, t.l.c. study of impurities in, 2E55
Food Yellow 2, detmn. of 2- and 4-aminoazobenzene in, by t.l.c., 2F34
Food Yellow 3, detmn. of 4,4′-diazoaminodi(benzenesulphonic acid) in, by h.p.l.c., 2F37
sepn. and detmn. of sulphonated subsidiary dyes, in, by t.l.c. - densitom., 2F36
spectral data for compounds related to, 5D42
t.l.c. study of impurities in, 2E55
Food Yellow 4, detmn., and detmn. of intermediates of, liquid chrom., 3C68
Mordant Black 3, as reagents for Mo or W, 2B122
for Zr, 6B138
Mordant Black 11, as reagent for heparin, 5D39
for Mg, 1B40
for Mo, 4B115
for Mo or W, 2B122
ion-sensitive electrode for, 5J93
Mordant Blue 1, as reagent for Al, 6E40
Mordant Blue 3, as reagent for Be, 6B56
for Hf, 3B102
for Fe, with tridodecylethylammonium bromide, 5B186
for Rh, 3B162
for Zr, 6B138
Mordant Blue 10, as redox indicator, 1A5
Mordant Blue 13, as metallochromic indicator, 1B43
Mordant Blue 27, paper-chrom. purification of, 3B77
Mordant Blue 29, as reagent for Al, with cetrimide, 5B88
for Be, with benzylhexadecyldimethylammonium chloride, 6B53
with hexadecyltrimethylammonium ion, 3B48
for Zr, 6B138
Mordant Red 7, as metallochromic indicator, 1B43
Mordant Violet 5, as reagent for ClO_2, 3B136
Mordant Violet 25, as reagent for In, 1B59
for Sn, 1B87
Natural Red 4, as reagent for Cu, 5B37
Reactive Blue 4, detmn., potentiom., 5C49
Solvent Red 23, detmn., by TAS technique - spectroph., 5E2
Solvent Yellow 2, detmn., by TAS technique - spectroph., 5E2
Dyes, not included in the Colour Index (Third Edition)
Janus green, as reagent for Hg, 5B82
for Ta, 4B104
Victoria blue, as reagent for In, 3B66
Dyflos, detmn. of radiochem. purity of ^3H- and ^{32}P-labelled, by t.l.c. - electroph., 4D82
Dysprosium, detmn., by a.a.s., interferences in, 5B100
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in rare-earth concentrates, by n.a.a., 6B85
in water, by n.a.a., 2H16
sepn. from other lanthanoids and Sc, by selective sorption, 3B73
Dysprosium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90

E

EM49, detmn. in fermentation media, spectroph., 4E24

NS, see *Naphthalene-1-sulphonamide, 4-ethyl-sulphonyl-*
SCA, see *Spectrometry, photo-electron, X-ray*
cgonine, detmn. in presence of benzoylecgonine and cocaine, by g.l.c. of heptafluorobutyryl deriv., 3D30
-, benzoyl-, detection in urine, by t.l.c., 6D17
detmn. in presence of ecgonine and cocaine, by g.l.c. of heptafluorobutyryl deriv., 3D30
detic acid, see *Edta*
dta, detmn., coulom., 6C30
volum., 6A7
in presence of interfering metal ions, by ion exchange - a.a.s., 3A6
in water, by g.l.c. of ethyl ester, 3H37
- calcium disodium salt, detmn. in iodinated contrast-media parenterals, automated spectroph., 1E44
- disodium salt dihydrate, standardisation of soln. of, by spectroph. titration, 4A10
ffluents, see *Industrial wastes; Sewage*
ffortil, see *Etilefrine*
gg yolk, detmn. of cholesterol in, spectroph., 6F15
ggs, detmn. of fenchlorphos and its O-analogue in, by g.l.c., 3F22
of naphthalophos in, by t.l.c. - fluorim., 3F23
of *N*-nitrosamines in, by g.c., 6F5
of Se in, fluorim., 5F9
of sulphadiazine in, by t.l.c. - fluorim., 1D27
laidic acid methyl ester, sepn. from methyl oleate, liquid chrom., 6C17
lectrochemical analysis, 6J74*B*
amperom. integrator for use in, 2J141
apparatus for, 1J68
in triethyl(hexyl)ammonium triethyl(hexyl)borate media, 2J139
mercury-film nickel-minigrid optically transparent thin-layer cell for, 2J131
lectrodes, applications of ion-sensitive, enzyme and gas-sensing, in enzymology, review, 3D11
dropping-mercury, mechanical drop-detacher for, 5J101
enzyme, amino-acid-sensitive, 2J138
phosphate-sensitive, 3J84
polyamine-sensitive, 5J97
urea-sensitive, 1J74, 2J138, 5J96
for coulom. generation of H^+, 5J102
for voltammetry, cathodic effects in behaviour of glass-sealed, 2J140
gas-sensing, graphical method for detmn. of dynamic measuring range of, 5J89
glass micro-bulb, 5J86
H_2O_2-specific, 2J137
ion-exchanger-coated platinum, 2B7
ion-sensitive, for NH_4^+, 3J83
for Sb^V, 3B111
for Ca^{2+}, 1J70, 2J135, 5J91, 6H48
effect of surfactants on response of, 6C72
for Ca^{2+} and bivalent cations, 5J90
selectivity-coeff. changes for liquid-membrane, 5J88
for ClO_3^-, 5J92
for Cu^{2+}, 2J134
for dodecyl sulphate ion, 5J94
for ephedrine and methylephedrine, 5J95
for Eriochrome black T, 5J93
for $H_2PO_4^-$, 2J136
for I^-, 1J73, 3J85
for leucine, 5D105
for Hg^{2+}, 3B59
for K^+, 3J82
for Na^+, reduction of interference due to ion leaching from, 6J70
temp. effects in use of, 6J71
Electrodes, ion-sensitive—*continued*
for Sr^{2+}, 1J71
for Tl, 3B111
in argentim. titrations, 5J87
report of symposium on, 4A1
pH-sensitive, carbon-fibre, 2J133
impedance stability of industrial, 3A1*C*
silver - silver chloride, polarisation characteristics of, 5J103
silver - silver sulphide, 1B10
Electrolytes, detmn. in soln., ion-exchange chrom., 3A12
Electron diffraction, apparatus for, 2J128
Electron micro-probe analysis, 1J66*B*
analysis of porous materials by, 3B89
atomic-number dependence of X-ray continuum intensity and calculation of background in energy-dispersive, 2J67
automatic data-handling system for, 6J38
calibration function for use in quantitative energy-dispersive, 2J68
computed α-coeff. for, 6J37
detmn. of very light elements by, 3B19
effect of carbon-film thickness in, 3J68
of individual micro-particles, 6J36
qualitative and quantitative analysis by use of valence-band spectra in, 2J66
Electron microscopy, airlock door for introduction of frozen specimens into JEM 100B instrument, 2J123
analytical applications of, 6A22*B*
apparatus for reflection, 2J128
scanning, for examination of radioactive materials, 2J127
application of semiconductor back-scattered-electron detector in scanning, 2J125
controlled focusing and stigmating in, 2J126
double-tilt modification of Stereoscan specimen stage, 5J84
magnetic prism spectrometer for high-voltage, 2J124
quantitative energy-dispersive analysis with use of scanning, 2A1*C*
secondary fluorescent excitation in scanning, 5J43
voltage-contrast detector for scanning, 5J85
Electron spin resonance spectrometry, see *Spectrometry, electron spin resonance*
Electrophoresis, see also *Isoelectric focusing; Isotachophoresis*
apparatus for, high-voltage temp.-gradient, 1J12
automated elution technique for, 5A2*C*
bibliography, 5J20
evaluation of electropherograms in, densitometer - mini-computer for, 5J19
system for discontinuous, based on use of two counter-ions, 6J12
—, on gels, apparatus for, water-cooled vertical, 2J20
for gel staining and de-staining for, 5J21
device for measurement of band-migration distances in, 1J13
elution system for preparative, 4J17
slab-gel moulds for use with agarose gels for, 4J16
Electroplating solutions, detmn. of Co and W in, polarogr., 6B210
detmn. of SO_4^{2-} in, volum., indicator for, 2B113
—, cadmium, detmn. of Cd and nitrilotriacetic acid in, volum., 5B77
—, copper, detmn. of formate and tartrate in, with use of Dohrmann DC-50 total-org.-C analyser, 2B33
Ellagic acid derivatives, detmn. in wood, by g.l.c. of trimethylsilyl deriv., 2C68

Emetine, sepn. from atropine, hyoscine and strychnine, paper chrom., 2E4
Emodin, detmn. of frangula, in preparations of frangula bark, by t.l.c. - spectroph., 1E13
sepn. from aloe emodin, chrysophanol and physician, by h.p.l.c., 3E15
Endomide, detmn., iodim., 6E26
Endosulfan, detmn., improved clean-up technique for, 4G33
identn., by g.l.c. of photolysis products, 2G36
Endrin, detmn., improved clean-up technique for, 4G33
in cereals or milk, by t.l.c., clean-up procedures for, 3F21
Enthalpimetry, 2A1*C*
enzymic 'direct injection' method for, 2A1*C*
in biochemistry, 2A1*C*
new instruments in, 5A6*C*
Environmental materials, analysis, report of conference on, 1A1
report of meeting on applications of new techniques in, 4A4
analysis and de-contamination of toxic pollutants in, 4A1*C*
analytical aspects of Hg and other heavy metals in, 6H56*B*
detmn. of Am and Pu in, radiochem., review, 2A7*C*
of gases and trace metals in, by g.c., review, 2H1
of hazardous substances in, 2A1*C*
of pesticide residues in, review, 4G27
of petroleum-pitch volatiles in, by g.c. - u.v. spectroph., 5A1*C*
of polycyclic hydrocarbons in, by computerised g.c. - m.s., 6A1*C*
of Se in, by g.c., 2A1*C*
of Te and U in, by n.a.a., 3D22
of trace elements in, by n.a.a., review, 2J149
dictionary of pollutants of, 2G39*B*
report of symposium on assessment of health effects of pollution of, 5A3, 5H46
Enzymes, applications of immobilised, in foods analysis and process control, 3F6
of stopped-flow micro-calorim. methods in study of reactions of, 2A1*C*
assay, fluorim., 1D108*B*
integration method for, 2D144
nomogram templates for use with LKB 8600 reaction-rate analyser for, 2D153
provisional recommendation on IFCC methods for, 5D92
in blood serum, Scandinavian recommended methods for, 4A1*C*
of bacterial cell-wall lytic, fluorim., 1D103
assay and monitoring of, applications of ion-sensitive, enzyme and gas-sensing electrodes in, review, 3D118
computerised apparatus for study of transients in reactions of, 3J66, 3J67
detmn. of metals in metallo-, emission spectrom., 2D143
spectroph. data for, 5D77
Enzymes, specific, acetylcholinesterase, assay, potentiom., 1D96
β-*N*-acetylglucosaminidase, sepn. of A and B isoenzymes of, in fibroblasts or amniotic cells, gel electroph., 3D128
N-acetylmuramoyl-L-alanine amidase, assay, fluorim., 1D103
acyl-CoA synthetase, assay, radiom., 3D133
acylesterase, sepn. from hyaluronidase, electroph., and identn., colour reaction for, 4D75
Enzymes, specific—*continued*
adenosine deaminase, assay, spectroph., 5D104
in blood cells, radiom., 2D161
adenosine 5′-phosphosulphate kinase, see *APS-kinase*
adenosinetriphosphatases, sepn. method for use in studies of, 1D107
adenylate cyclase, assay, radiom., 2D162
alanine aminotransferase, assay, assessment of Vitatron AKES reaction-rate analyser for, 2D145
reagent compositions for, 3D121*P*
in blood serum, fluorim., 2D149
aminolaevulinate dehydratase, see *porphobilinogen synthase*
δ-aminolaevulinate synthase, assay in liver homogenates and particulate fractions, comparison of methods for, 1D94
aminopeptidase, assay of agarose-bound, comparison of methods for, 1D99
amylase, assay in brewing materials, review of automated and semi-automated methods for, 4F28
in honey, by Amylochrome kit method, 4F14
spectroph., 6F11
in plants, improved dyed amylose for use in, 2D160
purification, affinity chrom., 5D101
aniline hydroxylase, see *aryl 4-monooxygenase*
APS-kinase, assay, by kinetic - spectroph. method, 4D74
arginase, assay, by kinetic - potentiom. method, with use of air-gap electrode, 5D106
arginine-esterase, assay, by h.p.l.c. - u.v. spectroph., 1D100
aryl 4-monooxygenase, assay in liver tissue, electrochem., 2D147
aspartate aminotransferase, assay, assessment of Vitatron AKES reaction-rate analyser for, 2D145
in blood serum, fluorim., 2D149
of cardiac and liver isoenzymes of, in blood serum, by kinetic - u.v. spectroph. method, 2D150
ATP phosphoribosyltransferase, assay, by bioluminescence method, 4D73
benzylamine oxidase, assay, spectroph., 5D104
carbohydrases, spot test for localisation of activity peaks in liquid-chrom. effluents containing, 3D129
cathepsin B, assay, spectroph., 4D77
cholesterol 7α-hydroxylase, assay in liver microsomes, by t.l.c. - g.l.c., 1D93
cholesterol oxidase, assay, specificity of substrate for, 6A1*C*
u.v. spectroph., 2D79
cholinesterase, assay in blood, by fluorim. titration, 3D126
chymotrypsin, assay, gel electroph. - colorim., 3D130
trans-cinnamic acid 4-hydroxylase, spectroph., 5D95
collagenase, assay, radiom., 4D78
creatine kinase, assay in blood serum, by automated kinetic method, 2D154
of isoenzymes of, in blood serum, avoidance of artefact in gel-electroph. sepn. in, 2D152
creatine phosphokinase, sepn. of isoenzymes of, by isoelectric focusing, 6A2*C*
cyclic 3′:5′-nucleotide phosphodiesterase, assay, under-estimation by ion-exchange-chrom. - radiom. method for, 2D158
deoxyribonuclease, see *DNase*
dipeptidase, assay, fluorim., 4D58

zymes, specific—*continued*
DNase, assay, by kinetic - spectroph. method, new synthetic substrate for, 5D100
dopamine β-hydroxylase, assay in blood serum, radiom., 2D148
dopamine β-monooxygenase, assay, radiom., 1D92
epoxide hydratase, assay in liver tissue or microsomes, liquid chrom., 3D132
esterases, assay, by g.l.c., 2D155
in blood serum, gel electroph. - densitom., 1D97
exo-β-*N*-acetylmuramidase, fluorim., preparation of substrate for, 1D102
β-fructofuranosidase, assay in intestinal mucosa, automated, 5D102
β-galactosidase, assay in intestinal mucosa, automated, 5D102
glucose oxidase, assay, by kinetic - spectroph. method, 5D93
glucose-6-phosphate dehydrogenase, assay in erythrocytes, spectroph., 2D146
glutamate oxaloacetate aminotransferase, see *aspartate aminotransferase*
glutamate pyruvate aminotransferase, see *alanine aminotransferase*
γ-glutamyl transpeptidase, assay in blood serum, problems arising in, 4D72
γ-glutamyltransferase, assay in blood serum, substrate/product inhibition in, 4A1*C*
glutathione dehydrogenase (ascorbate), assay in wheat flour or bran, spectroph., 1F9
hexokinase, assay, direct-injection enthalpim., 3D122
histidine decarboxylase, assay, radiom., 1D105
hyaluronidase, sepn. from acylesterase, electroph., 4D75
2-hydroxybutyrate dehydrogenase, assay, assessment of Vitatron AKES reaction-rate analyser for, 2D145
in blood serum, fluorim., 2D149
spectroph., 2D146
isocitrate dehydrogenase, assay in blood serum, spectroph., 2D146
lactase, see *β-galactosidase*
lactate dehydrogenase, assay, integration method for, 2D144
in blood serum, amperom., 5D86
correction for turbidity in, 1D1
spectroph., 2D146
of isoenzymes of, new instrument for, 5A2*C*
sepn. of isoenzymes of, by isoelectric focusing, 6A2*C*
lactoperoxidase, detection of inhibitors of, by t.l.c., 3D120
leucine aminopeptidase, assay, spectroph., 5D104
lipase, triacylglycerol, assay, spectroph., 2D156
in blood serum, by kinetic method, 3D125
lipoamide dehydrogenase, assay, spectroph., 1D90
in erythrocytes, spectroph., 5D94
lysine hydroxylase, assay, by ^{3}H-release method, 1D91
lysozyme, assay, fluorim., 1D103
o.r.d. spectrom., 1D98
detmn. of mercapto-groups in, amperom., 5D75
3-*O*-methylfluorescein phosphatase, assay, fluorim., 1D104
nucleosidase, assay, radiom., 5D103
5′-nucleotidase, assay in blood serum, simult. with alkaline phosphatase, 5D99
penicillin amidase, assay, by g.l.c., 4D80
pepsin, assay, spectroph., method differentiating 'true' and potential activity, 3D131
detmn. of mercapto-groups in, amperom., 5D75

Enzymes, specific—*continued*
phosphatases, assay in blood serum, correction for turbidity in, 1D1
alkaline, assay, radiom., 3D127
in blood serum, by kinetic method, 2D157
simult. with 5′-nucleotidase, 5D99
of isoenzymes of, in blood serum, by kinetic - spectroph. method, 4D76
phosphoglucomutase, assay of isoenzymes of, with use of pre-packaged 'overlay' reagents, 5D97
6-phosphogluconate dehydrogenase, assay in erythrocytes, spectroph., 2D146
poly(adenosine diphosphate ribose) glycohydrolase, assay, radiom., 1D106
porphobilinogen synthase, assay in erythrocytes, as indication of exposure to Pb, 5D10
proline hydroxylase, assay, by ^{3}H-release method, 1D91
proteases, assay, automated colorim., 4A1*C*
potentiom., with leucine-selective electrode, 5D105
in wheat, automated fluorim., 3G4
chromophoric deriv. for evaluation of activity on gluten of, 4D79
protein kinase, assay, radiom., 1D95
of cyclic-AMP-dependent, synthetic substrate for, 5D96
pyridoxine kinase, assay in erythrocytes, radiom., 2D151
pyrimidine deoxyribonucleoside kinase, assay, radiom., 3D123
pyruvate kinase, assay in gastric mucosa, fluorim., effect of presence of fructose 1,6-diphosphate in, 3D124
rhodanese, see *thiosulphate sulphurtransferase*
RNA polymerase, assay, spectroph., 4D10
sorbitol dehydrogenase, assay in blood serum, spectroph., 2D146
subtilisin, assay, potentiom., with leucine-selective electrode, 5D105
succinate dehydrogenase, detection, composition for, 3D119*P*
sucrase, see *β-fructofuranosidase*
superoxide dismutase, assay, polarogr., 4D71
thiosulphate sulphurtransferase, assay, by pH titration - spectroph., 5D98
trypsin, assay, by h.p.l.c. - fluorim., 1D100
gel electroph. - colorim., 3D130
spectroph., 5D104
of agarose-bound, comparison of methods for, 1D99
detmn. of inhibitors of, in textured soya proteins, semi-automated spectroph., 1F12
urease, assay, by kinetic - potentiom. method, with use of air-gap electrode, 5D106
detmn. of inhibitors of, by thermom. titration, 4D81
Enzymic analysis, applications of, in sugar-factory laboratory, 6F7
optimisation of kinetic, 5A2*C*
report of symposium on automated, 4A1
with use of immobilised enzymes, 3D1
Ephedrine, detmn., potentiom., ion-sensitive electrode for, 5J95
spectroph., 1E7
in syrups, spectroph., 2E11
— **hydrochloride,** detmn., volum., 2E6
Epiandrosterone, detmn. of conjugated, in blood plasma, by m.s., 6D50
—, **dehydro-,** see *Androst-5-en-17-one, 3β-hydroxy-*
4-Epianhydrotetracycline, detmn. in tetracycline, by h.p.l.c., 3E21
by t.l.c. - fluorim. (or u.v. spectroph.), 5E23
liquid chrom. - spectroph., 3E22

Epidote, detmn. of Ti in, spectroph., 5B126
Epinephrine, see *Adrenaline*
4-Epitetracycline, detmn. in tetracycline, by h.p.l.c., 3E21
by t.l.c. - fluorim. (or u.v. spectroph.), 5E23
paper chrom. - spectroph., 3E22
Epoxide hydratase, see under *Enzymes, specific*
Epoxides, detmn. in air, sorbents for, 1H14
Epoxy-groups, detmn. in methacrylate copolymers, i.r. spectroph., 3C77
Equilenin, detmn. of conjugated or esterified, in tablets, by t.l.c. - u.v. spectroph., 4E41
Equilin, detmn. of conjugated or esterified, in tablets, by t.l.c. - u.v. spectroph., 4E41
Equol, sepn. from other oestrogens, gel chrom. - paper chrom., 4D48
Erbium, detmn., by a.a.s., interferences in, 5B100
spectrogr., effect of NaCl carrier in, 5B94
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in presence of Al and Fe, arsenate - iodim., 4B57
Erbium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Ergocornine, sepn. from related compounds and identn., by t.l.c., 1E6
Ergocristine, sepn. from related compounds and identn., by t.l.c., 1E6
Ergocryptine, sepn. from related compounds and identn., by t.l.c., 1E6
Ergometrine, detmn. in pharmaceutical preparations, semi-automated fluorim. or spectroph., 4E13
from related compounds and identn., by t.l.c., 1E6
Ergotamine, sepn. from related compounds and identn., by t.l.c., 1E6
Ergotaminine, detmn. in blood plasma. by h.p.l.c. - fluorim., 6J52
Erucic acid, detmn. in rapeseed, by g.l.c. of methyl ester, automated, 2G11
Erythritol tetranitrate, detmn., volum., 6C96
Erythrocytes, assay of adenosine deaminase in, radiom., 2D161
of cholinesterase in, by fluorim. titration, 3D126
of glucose-6-phosphate and 6-phosphogluconate dehydrogenases in, spectroph., 2D146
of lipoamide dehydrogenase in, spectroph., 5D94
of porphobilinogen synthase in, as indication of exposure to Pb, 5D10
of pyridoxine kinase in, radiom., 2D151
detmn. of *N*-acetylneuraminic acids from membranes of, purification procedure for use in, 6D59
of adrenaline and noradrenaline in, by g.l.c., 1D25
of K in lysed, comparison of methods for, 4A1*C*
Essential oils, analysis, by g.c., 2A6*C*
characterisation, by m.s. of solid deriv. of carbonyl compounds, 2C67
identn. of monoterpenes in, by study of temp. variation of Kovats indices, 3C66
Esterases, see under *Enzymes, specific*
Etenzamide, detmn. in analgesic tablets, by g.l.c., 6E4
Ethane, detmn. in ethylene, by g.l.c., 4C9
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
of H in, by g.s.c., 1B20
identn. in pyrolysis products of methane, by g.c., 6C13
—, **chloro-,** identn. and detmn. in vinyl chloride, by g.l.c., 1C70
Ethane—*continued*
—, **1,2-dibromo-,** detmn in wheat, flour or bran, volum., 5G38
—, **dichloro-,** contamination by plasticisers of high-purity, 2D1
—, **1,2-dichloro-,** detmn. in spice oleoresins, by g.c., 4F23
—, **1,2-dichloro-1,2-difluoro-,** sepn. of diastereoisomers of, by g.l.c., 6C41
—, **epoxy-, derivatives,** detmn., amperom. or nephelom., 5C47
fractionation of oligomers of, by h.p.l.c., 3C63
sepn. and identn. of adducts with cardanol or 3-pentadecylphenol, by t.l.c. - n.m.r., 2C66
—, **tetrachlorodifluoro-,** sepn. of isomers of, from related compounds and from each other, by g.l.c., 1C19
—, **trichlorotrifluoro-,** sepn. of isomers of, from related compounds and from each other, by g.l.c., 1C19
Ethanediol, acid - base equilibria in mixtures with other solvents of, 1C23
detmn. in used crankcase oil, by g.c., 3C54
in water, spectroph., 3H35
sepn. from other alcohols, by h.p.l.c., 2C14
— **dinitrate,** detmn. in air, by isotope dilution - m.s., 5H17
Ethanediol, 4-hydroxy-3-methoxyphenyl-, identn. and detmn. in amniotic fluid, by g.l.c. and g.l.c. - m.s. of pentafluoropropionyl deriv., 6D43
Ethanesulphonic acid, 2-[bis-(2-hydroxyethyl)-amino]-, as secondary pH standard in range 6·6 to 7·4, 3D4
Ethanol, detmn., by g.c., collaborative study of B.P. 1973 method for, 5E47
conductim., 5C4
in air, by g.c., review, 3D50
in blood, by g.c. of headspace vapours, 3D51
in blood or urine, enzymic - amperom., 2D47
in blood serum, enzymic - amperom., 5D86
in brewing materials, review of automated and semi-automated methods for, 4F28
in meat products, enzymic - spectroph., 5F22
in wine, by g.s.c., 1F19
by h.p.l.c., 5F57
of K and Na in, flame photom., 1C4
identn. and detmn. in isobutyl or isopropyl alcohol, by g.l.c., 4C14
—, **2-amino-, derivatives,** detmn., by g.l.c. of trimethylsilyl deriv., 2C25
—, **2-mercapto-,** detmn., potentiom., 6C32
Ethanolamine, see *Ethanol, 2-amino-*
Ethchlorvynol, detmn. in biol. fluids, by h.p.l.c., 4D17
Ether, bis-(4-acetylphenyl), detmn. of impurities in, by g.l.c., 1C33
—, **bis(chloromethyl),** detmn. in air, by g.l.c., 1H17
by g.l.c. - m.s., 1H18
—, **chloromethyl methyl,** detmn. in air, by g.l.c., 1H17
—, **dibutyl,** identn. and detmn. in isobutyl alcohol, by g.l.c., 4C14
Ethers, chloroalkyl, detmn. in air, sorbents for, 1H14
Ethidium derivatives, m.s. study of, 1E48
Ethinyloestradiol, see *Oestradiol, ethynyl-*
Ethirimol, sepn. from 2-aminobenzimidazole, benomyl, diethirimol and methyl benzimidazol-2-ylcarbamate, by t.l.c., 3G26
Ethopropazine, detmn., spectroph., 1E4
Ethosuximide, detmn. in blood plasma or blood serum, inter-laboratory study of, 6D20
in blood serum, by g.l.c. of *N*-butyl deriv., 3D35

hoxyquin, detmn. in feeding-stuffs, foods or water, by g.l.c., 5G20
g.c. - m.s. study of soln. in org. solvents of, 5G20
hyl centralite, see *Carbanilide, NN-diethyl-*
hylamine, 1-(adamantan-1-yl)-, see *Rimantadine*
hylene, analysis of products of reaction with but-2-ene of, by g.c., 6C14
detmn. in air in presence of other alkenes, by indirect a.a.s., 5H13
in chlorination products of methane, by g.c., 1C17
in gas mixtures, i.r. fluorim., with laser excitation, interferences in, 5H12
from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
of acetylene, ethane and methane in, by g.l.c., 4C9
identn. in pyrolysis products of methane, by g.c., 6C13
sepn. from other alkenes, by g.l.c., 6C16
from propane, by g.s.c., effect of sample size in, 2C12
, 1,1-dichloro-, identn. and detmn. in vinyl chloride, by g.l.c., 1C70
, 1,1-dichloro-2,2-bis-(4-chlorophenyl)-, see *DDE*
, tetrachloro-, detmn., by KOH decomposition - potentiom., 2E56
in de-fatted meals, by g.l.c., 5G17
, trichloro-, detmn., by KOH decomposition - potentiom., 2E56
in spice oleoresins, by g.c., 4F23
in waste water, by g.c., 1H47
of K and Na in, flame photom., 1C4
hylene oxide, see *Ethane, epoxy-*
hylenediamine, analysis of products of reaction with urea of, by t.l.c. - densitom., 6C29
hylmaltol, see *Pyran-4-one, 3-hydroxy-2-ethyl-*
hylmorphine, detmn., polarogr., 1E5
in pharmaceutical preparations, volum., 4E12
in presence of codeine, i.r. spectroph., 6E3
hydrochloride, detmn., volum., 2E6
ilefrine, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., and identn., by t.l.c. and/or paper chrom., 1E38
ucalyptus wood, detmn. of ellagic acid deriv. in, by g.l.c. of trimethylsilyl deriv., 2C68
ucatropine, detmn. in pharmaceutical preparations, u.v. spectroph., 4E14
***ugenia* spp.,** identn. and detmn. of sugars in *E. jambos, E. malaccensis* and *E. michelli*, by g.l.c. of trimethylsilyl deriv., 2F30
ugenol, detection, by t.l.c., 6E20
detmn. in oil of bay, by g.l.c., 3C65
***uphorbia* spp.,** detmn. of hyperoside and kaempferol 3-β-glucoside in, by t.l.c. - spectroph., 1E12
identn. of diterpene-ester inflammatory toxins of, by t.l.c. - m.s., 1D48
uropium, detmn., fluorim., 6B88
radiopolarogr., 1B132
spectrogr., effect of NaCl carrier in, 5B94
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in presence of La and Yb, liquid chrom. - flame emission spectroph., 4B56
in rare-earth concentrates, by n.a.a., 6B85
in water, by n.a.a., 2H16
sepn. from Am, Cm and Y, ion-exchange chrom., 2B72
from other lanthanoids and Sc, by selective sorption, 3B73
from Pr or Zr, by ion exchange, 4J13
solvent extraction of, from HNO_3 soln. with alkylene and vinylene deriv. of phosphine oxide, 1B79, 6B106
Europium, reagent for, La complex with piperidine and 4,4,4-trifluoro-1-phenylbutane-1,3-dione, 6B88
Europium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Evaporation, solvent recovery and re-use with Kuderna - Danish device for, 5J7
Exhaust gases, car-, analysis of polycyclic hydrocarbons in, supercritical-fluid chrom., 5A1*C*
Exo-β-*N*-acetylmuramidase, see under *Enzymes, specific*
Explosives, detection of firearm-discharge residues on clothing, fluorescence reaction for, 1D16
m.s. study of, 2C85
sepn. and identn. of minor components in smokeless powders, by t.l.c., 1C85

F

Faeces, concn. of blood in, 4A1*C*
detmn. of apomorphine in, by g.l.c. of trimethylsilyl deriv., 3D29
of CuS in, by a.a.s., 5D6
of fatty acids in, 4A1*C*
of hexachlorobenzene and its metabolites in, by t.l.c., h.p.l.c. or g.l.c., 5D34
of ^3H in, by O-flask combustion - liquid scintillation counting, 2D142
of lipids in, spectroph., 5D51
of nitrate-N in, multi-range analytical manifold for automated, 4H40
of paraquat in, by t.l.c., 1D36
of Pu in, 1A1*C*
of radionuclides in, by liquid scintillation counting, decolorisation of extracts for, 1D4
of TH 6040 in bovine, by h.p.l.c., 1G17
of talinolol in, spectroph., 5D27
sepn. and identn. of 3-(4-chlorophenyl)-2-methyl-4-oxopyrido[2,3-*d*]pyrimidine metabolites and decomposition products in, 1D19
Fats and fatty oils, see also *Fish oils*; *Vegetable oils*
analysis, applications of gel-chrom. methods in, review, 4C87
liquid chrom., with use of moving-wire detectors, review, 5F66
review, 5F61
of diacylglycerols in, by g.l.c. of trimethylsilyl deriv., 4F35
of fatty acids in, by g.l.c., review of esterification methods for, 4F38
bibliographies, 2F43, 5F60
characterisation of polycyclic hydrocarbons in, by g.l.c., 2F16
detmn., by ring-oven method, 5F62
in beef or beef - soya blends, comparison of methods for, 1F11
in cream or milk, 5F29
in meat or meat products, by solvent extraction - densitom., 5F24
choice of system for, 5F23
i.r. a.t.r. spectroph., 4F16
in milk, evaluation of Babcock method for, 4F18
of antioxidants in, by distillation - g.l.c., 4G11
of migration of, into plastics, comparison of methods for, 3F39
of migration from plastic packaging materials into, with use of ^{14}C-labelled fat simulant, 1F1
of iodine values of, coulom., 3F43
of oxidative spoilage of animal, comparison of methods for, 3F44

Fats and fatty oils, determination—*continued*
of peroxides in, comparison of methods for, 3F45
of saponification values and splitting degrees of, rapid volum. methods for, 3F42
of solid-fat content of, comparison of pulsed and wide-line n.m.r. and dilatometry for, 2F45
of sulphadiazine in, by t.l.c. - fluorim., 1D27
of total sterols in unsaponifiable fraction of, enzymic - spectroph., 2D79
of vinyl chloride in simulated, by g.l.c., 3C80
of volatile compounds in, by g.l.c., recovery by high-vacuum de-gassing - thin-film molecular distillation, 3F46
methods for adjustment of content of, in meat products, and detmn., 1F10
sepn., identn. and detmn. of constituents of unsaponifiable fraction of, by g.l.c. of trimethylsilyl deriv., and sepn. of lipid constituents of, gel chrom., 5F64
Fatty acids, analysis, by h.p.l.c., review, 3D70
by reaction g.l.c. or g.l.c. - m.s., 2F47
of mixtures of branched-chain, by g.l.c. of methyl esters, 5D48
detection, by g.c. - m.s. of t-butyldimethylsilyl esters, 5D46
detmn. in blood serum, correction of systematic error in, 5D44
in faeces, 4A1*C*
in fats and fatty oils, by g.l.c., review of esterification methods for, 4F38
in rapeseed oil, by t.l.c. of methyl esters, 2G12
of free, in beer, by g.l.c., 3F35
in blood plasma, by g.c., 6A1*C*
by g.l.c., 4D37
spectroph., salting-out technique for, 3D61
in blood plasma or blood serum, by automated g.l.c., 3D73
in blood serum, by automated Duncombe method, 3D60
by g.l.c., 6D40
by g.l.c. of methyl esters, 3D67
of number of double bonds in, by t.l.c. of bromo-deriv. of ethyl esters, 3C18
of position isomers of methyl-branched, by g.l.c. - m.s. of methyl esters, 5D49
g.l.c. study of trimethylene-interrupted C_{18}-di-unsaturated, 2C20
identn. of unsaturated, by g.l.c., 5F68
sepn., by g.c. of esters, classification schemes for stationary phases for, review, 4J22
by h.p.l.c. of methyl esters, 3F48
from resin acids and analysis, by g.l.c. of methyl esters, 2H46
of *cis-* and *trans*-isomers of, by g.l.c., 2A6*C*
of polyunsaturated, by t.l.c. of methyl esters, 6D41
sepn. and detmn., by g.l.c. of esters, comparison of isothermal and temp.-programmed methods for, 5F69
sepn. and purification of labelled, by t.l.c., 6D39
—, **C_{14} to C_{28},** identn. in *Convolvulus pluricaulis*, by t.l.c. - g.l.c., 3E18
Feeding-stuffs, detection of *Datura* alkaloids in, by t.l.c., 1F5
of mycotoxins in, by dialysis - t.l.c., 5G22
detection and detmn. of aflatoxin B_1 in citrus-pulp-containing, by t.l.c., 3G17
detmn. of antioxidants in, by distillation - g.l.c., 4G11
of ascorbic plus dehydroascorbic acids in, 5F72
of betaine in, by g.l.c. of trimethylsilyl deriv., 3G16
Feeding-stuffs, determination—*continued*
of bound formaldehyde in treated protein, spectroph., 4G9
of cebegine in, by g.l.c. of free base, 3G20
of Co in forages or grains, by a.a.s., 4G8
of dinitolmide in, spectroph., 2G17
of ethoxyquin in, by g.l.c., 5G20
of 4-ethylsulphonylnaphthalene-1-sulphonamide in, by g.l.c. of methyl deriv. or fluorim., 2D56
of fibre content of, evaluation of 'ruggedness' of acid - detergent method for, 3G15
of lysine and methionine in, by g.l.c. of trimethylsilyl deriv., 6G5
of NO_3^- in clover or grass, potentiom., with ion-sensitive electrode, 2G10
of N in, by Kjeldahl method, TiO_2 - $CuSO_4$ catalyst for, 1G11
of organochlorine pesticides in, by vapour-phase purification - g.l.c., 4G30
of polybrominated biphenyls in, by u.v. irradiation - g.l.c., 5G19
liquid chrom. - g.l.c., 5G18
of protein-N in, automated, 5G13
of robenidine in, by automated h.p.l.c., 2G18
by t.l.c. - spectroph., 3G19
spectroph., 4G16
of roxarsone in pre-mixes, by a.a.s., 4G15
of Se in pre-mixes, by a.a.s., 4G7
of stilboestrol in molasses-based supplements, by g.l.c. of trimethylsilyl ether, 2G16
of tetrachloroethylene in de-fatted meals, by g.l.c., 5G17
of tryptophan in, fluorim., 4G10
isolation of aflatoxins in, by t.l.c., 5G21
Feldspar, detmn. of elements in, emission spectrom., with ion-beam excitation, 4J44
Fenchlorphos, detmn. in eggs, with its O-analogue, by g.l.c., 3F22
in vegetables, by g.l.c., avoidance of interference by S compounds in, 2G30
Fenitrothion, detmn. in biol. tissues, radiom., and detmn. of O-analogue of, by t.l.c., 1G19
in vegetables, by g.l.c., avoidance of interference by S compounds in, 2G30
Fenuron, detmn., by alkylation - g.l.c., 2G33
Feprazone, detmn. in blood plasma, by g.l.c., 5D21
Ferricyanide, detmn., spectroph., 6B112
in water, by reactive ion exchange - a.a.s., 2H31
fluorim., 2A1*C*
Ferrites, detmn. of Ba in, complexom., and of Co, Fe and Zn in, spectroph., 6B206
of Ba, Fe and Sr in hexa-, X-ray spectrogr., 2B138
of Co, Cu and Na in materials for production of, by n.a.a., as indication of degree of mixing, 3B147
of elements in, automated potentiom., 2B137
particle size analysis, comparison of methods for, 6B207
Ferrocyanide, detmn., spectroph., 6B112
volum., indicators for, 1A5, 2A18
in water, by reactive ion exchange - a.a.s., 2H31
Ferrous alloys, see *Iron alloys*
Fertilisers, analysis of K ores intended for, in non-aq. media, 5G8
detmn. of ammonia-N in phosphate, volum., 5G9
of B in, by a.a.s., 4G5
of Fe and Zn in, by a.a.s., extraction methods for, 4G6
of N in, by Kjeldahl method, 3G13
of K in, automated flame photom., 4G4
of sulphate-S in phosphate, by a.e.s., 5G11

estuca ovina, analysis of wax from, by t.l.c., g.l.c. and liquid chrom., 3D71
bres, analysis of binary mixtures of, i.r. spectroph., 5C52
detmn. of anionic groups in polyacrylonitrile, evaluation of methods for, 2C72
of elements in, X-ray spectrom., portable instrument for, 2C71
of polypropene in blends, by hot-extraction process, 6C84
eld-ion microscopy, method for calibration of atom-probe instrument for, 2J65
specimen preparation for, 5J83
ltration, applications of particle size analysis in, 6J78
centrifugal system for membrane, 3D90
manifold for, 5J6
sepn. of materials by ultra-, 2J8
sh meal, detmn. of N in, by Kjeldahl method, TiO_2 - $CuSO_4$ catalyst for, 1G11
of *N*-nitrosodimethylamine in, by g.l.c. - m.s., 4G17
sh oils, see also *Cod-liver oil*
detmn. of average mol. wt. and iodine value of, by n.m.r., 4F33
sh tissues, see also *Mackerel*; *Tuna*
analysis of fatty acids and resin acids in, by g.l.c. of methyl esters, 2H46
characterisation of polycyclic hydrocarbons in, by g.l.c., 2F16
detmn. of As in, by a.a.s., 3F5
of Cd in, by a.a.s., 3F3
of Cd, Cu, Fe, Pb and Mn in, by a.a.s., 5F6
of chloroalkanes in, by g.l.c., elimination of interference by chlorinated aromatic compounds in, 2D51, 2D52
of Cr, Ag and Zn in, comparison of methods for, 3D10
of di- and tri-methylamine in, or in products of, by g.l.c., 3F10
of ^{129}I in, by n.a.a., 3D24
of Hg in, by a.a.s., 3F4
by n.a.a., 1D9
emission spectrom., 5B80
of Hg in different chemical forms in, by a.a.s., 2F3
of methylmercury compounds in, by g.l.c., 5F13
of *N*-nitrosamines in, by g.c., 6F5
of organochlorine compounds in, 2A4*C*
of polypeptides in extracts of, turbidim., 3F11
of Squoxin in, by g.l.c. of methyl deriv. or spectroph., 3D52
of H_2O-binding capacity of cooked, gravim., 2F26
ame photometry, see under *Spectroscopy, emission*
avone-8-carboxylic acid, methyl-, detmn. in blood plasma, by t.l.c. - spectroph., or in urine, by t.l.c. - densitom. or g.l.c. of methyl ester, 5D29
avonoid glycosides, detmn. in *Euphorbia* spp., by t.l.c. - spectroph., 1E12
paper-chrom. study of, 6D2
avoxate, detmn. in presence of its metabolite, in blood plasma, by t.l.c. - spectroph., or in urine, by t.l.c. - densitom. or by g.l.c. of methyl ester, 5D29
our, assay of glutathione dehydrogenase (ascorbate) in, spectroph., 1F9
detmn. of damaged starch in, review, 2F25
of 1,2-dibromoethane in, volum., 5G38
of *N*-nitrosamines in, by g.c., 6F5
of oil, protein and H_2O in, near-i.r. reflectance spectroph., 3G5
of resmethrin in, by g.l.c., 4G39
Flour—*continued*
identn. and detmn. of (*S*)-3,4-dihydroxybutyrate in, by g.l.c. - m.s. of trimethylsilyl deriv., 2D64
Flucytosine, detmn. in blood serum or urine, by h.p.l.c., 3D48
Flue dust, detmn. of Re in, reversed-phase chrom. - u.v. spectroph., 4B137
Flue gases, analysis of S compounds in, iodim., 5H9
Flunitrazepam, detmn. in blood or blood plasma, with its metabolites, by t.l.c. - fluorim., 4D20
Fluocinolone acetonide, detmn., spectroph., 3E26
Fluoranthene, detmn. in water, by g.l.c. - m.s., 3H39
sepn. from other hydrocarbons, by h.p.l.c., 2J10
Fluorenecarboxylic acid, detmn. in presence of HNO_3 and H_2SO_4, by h.f. titration, 6C55
Fluoride, detmn., by kinetic method, comparison of Landolt reactions for, 6B184
spectroph., 2B125
in air, automated potentiom., with ion-sensitive electrode, 2H13
in air or clay, colorim., 6H14
in blood plasma, potentiom., with ion-sensitive electrode, 2D24
in phosphates, potentiom., with ion-sensitive electrode, 5B140
in presence of other halides, potentiom., with ion-sensitive electrode, 4B92
in plants, comparison of sample-preparation methods for, 5G14
potentiom., with ion-sensitive electrode, 5G15
with use of steam-distillation from H_2SO_4, 2D23
in sea-water, collaborative study of, 2H37
in soil, colorim., 2G6
in uranium or uranium oxide, potentiom., with ion-sensitive electrode, 6B101
in water, colorim., interference by SO_4^{2-} in SPADNS method for, 2H38
potentiom., with ion-sensitive electrode, 2H36, 6H30
volum., 6H39
of hydrolysable, in sulphur hexafluoride, B.S.I. method for, 3B120
sepn. from other halides, gel chrom., 1B130
Fluorimetry, apparatus for, double-beam, single-photomultiplier, 4J52
laser remote-sensing, 2A4*C*
permitting simult. collection of fluorescence spectra at different excitation wavelengths, 4J50
portable solid-state, for measurement of chlorophyll fluorescence induction in plants, 1J41
time-sharing instrument for alternative use as reflectometer or spectrophotometer, 1J32
applications of relative fluorescence efficiency to detmn. of impurities in soln. of complex fluorescing molecules, 2A1*C*
Eimac lamp as excitation source in, 6J52
front-face laser technique for, 6J50
principles and apparatus in, review, 6J49
single-photon, 1J40
Fluorine, detmn., by a.a.s., as SiF_4, 5B173
by n.a.a., 2J150
prompt-γ-ray spectrom., 5A5*C*
volum., as SiF_4, 6B183
with electron micro-probe, 2J66
in air, as SiF_4, by g.c., 3B131
in biol. materials, by O-bomb combustion - potentiom., with ion-sensitive electrode, 5D12

Fluorine, determination—*continued*
in cement, clinker or slag, or in mixtures of raw materials, photom., 4B126
in industrial-grade sodium fluoride, volum., B.S.I. method for, 3B30
in inorg. fluorides, by aq. $AlCl_3$ attack - potentiom., with ion-sensitive electrode, 4B127
in org. compounds, see under *Organic elementary analysis*
in silicates, with ion micro-probe, 4B70
of distribution of, in dental enamel, by proton activation, 2J156
Fluorite (*mineral*), detmn. in circulating ore slurry, on-line n.a.a. method for, 2B44
of F in, by aq. $AlCl_3$ attack - potentiom., with ion-sensitive electrode, 4B127
Fluoroapatite, detmn. of Cl^- in, potentiom., with ion-sensitive electrode, 5B139
Fluorosulphonic acid, detmn., potentiom., in anhyd. HF media, 4B16
Fluorspar, see *Fluorite*
Flurazepam, detmn. in blood plasma, blood serum or urine, with its metabolites, by g.l.c., 2D31
in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
—, ***N*-dealkyl-,** detmn. in blood, differential pulse polarogr., 6D25
Fly ash, see *Coal ash*
Folate, detmn. of ^{3}H-labelled, in faeces, by O-flask combustion - liquid scintillation counting, 2D142
Folcidin, see *Cypendazole*
Folic acid, detmn., by chemiluminescence method, 5E4
in presence of *N*-(4-aminobenzoyl)glutamic acid, by t.l.c. - spectroph., 5E26
—, **methyltetrahydro-,** identn. of product of reaction with dopamine of, by radio - g.l.c., 6D57
Folpet, detmn., indirect polarogr., 1G18
Foods, analysis, 4F39*B*, 6C100*B*
applications of h.p.l.c. in, review, 5F2
of m.s. in, review, 6J63
comparison of org. solvents for use in, 6F1
review, 5F1
applications of immobilised enzymes in analysis and process control of, 3F6
detection of additives in, by t.l.c., 5F37
of carbamate pesticides in, by t.l.c., clean-up method for, 6F24
of *Datura* alkaloids in, by t.l.c., 1F5
detection and detmn. of cyclamate and saccharin in, by t.l.c. - spectroph., 5F40
of maltol and ethylmaltol in, by t.l.c., 1F4
of *N*-nitroso-compounds in, with use of thermal-energy analyser, 2F12, 2F13
of saponins in, by t.l.c., 2F24
of vinyl chloride in, by g.l.c., 2F10
detmn. of As in, by a.a.s., 3F5
of As and Pb in, by a.a.s., 4E2
of ascorbic acid in, turbidim., 1F24
of ascorbic plus dehydroascorbic acids in, spectroph., 5F72
of benzoic acid in, automated spectroph., 2F38
of benzoic and sorbic acids in, u.v. spectroph., 3F19
of Br in, review, 2F7
of Cd in, by a.a.s., 4F3
comparison of methods for, 5A3*C*
of Cd, Cu and Pb in, inverse voltamm., 3F2
of Cd, Cu, Pb and Zn in, anodic-stripping voltamm., 2F1
Foods, determination—*continued*
of caffeine in, liquid chrom. - u.v. spectroph., 3F26
of carbamate and urea herbicides in, by g.l.c. of methyl deriv., 5F45
of carbaryl in, improved clean-up procedure for, 4G37
of chlordane in, by g.l.c., 4G32
of cholesterol in, by g.l.c. of trimethylsilyl ether, 2F48
of dietary-fibre content of, enzymic - gravim., 5F4
of dimethoate in, by t.l.c. - spectroph., 3F24
of di- and tri-methylamine in, by g.l.c., 3F10
of elements in, by a.a.s., review of atomisation techniques in, 5J49
by n.a.a., 6A3*C*
of ethoxyquin in, by g.l.c., 5G20
of glutamic acid in, ion-exchange chrom. - potentiom., 3F17
of I in, by n.a.a., 6D14
of Hg in, by a.a.s., 3G1
comparison of activation methods for, 6F2
of migration of auxiliary materials from plastics into, apparatus for, 5F10
of NO_3^- in baby-, potentiom., with ion-sensitive electrode, 4F4
of NO_3^- and NO_2^- in, review, 5F8
of NO_2^- in, fluorim., 1B103
of *N*-nitrosamines in, by g.c., 4F6, 6F5
by g.l.c. and g.l.c. - m.s., 5F12
of organochlorine pesticides in fatty, by h.p.l.c. - g.l.c., 2F41
of pesticides in, by g.l.c., extraction and clean-up methods for, 4G28
by sweep co-distillation - g.l.c., 4F26
review, 4G27
of phenethylamine in, by g.l.c. of trifluoroacetyl deriv., 1F3
of polysaccharides in protein-rich, by pptn., 1F14
of K in ash of, indirect amperom., 2F2
of pyridoxine in, fluorim., 5F71
of riboflavine in, automated, 3F52
of riboflavine and thiamine in, comparison of automated and manual methods for, 5F70
of saccharin in, by g.l.c. of *N*-methyl deriv., 6F23
of secondary amines in, by nitrosation - g.l.c., 4F5
of Se in, by g.l.c., 2F5
fluorim., 5F9
of sterigmatocystin in, by t.l.c., with use of 'grey scale', 2F19
of thiamine in, fluorim., 4D69
of vinyl chloride in, by g.l.c. - m.s. of head-space vapour, 2F11
extraction of acidic and basic compounds from, by homogenisation with two-phase solvent mixtures, 1F2
—, **canned,** device for sampling head-space vapours of, for g.l.c. analysis, 2J29
Forensic analysis, applications of i.r.-spectroph. methods in, 2A1*C*
applications of nuclear science in, review, 2A10
Formaldehyde, detmn., spectroph., 2C18
in clothing, spectroph., 1C69
in presence of dimethoxymethane, methanol and methyl formate, by g.c., 3C15
in water, by chemiluminescence method, 6H43
of bound, in cellulose esters, polarogr., 6C77
in treated feed proteins, spectroph., 4G9
of free and fixed, in textile auxiliaries, polarogr., 4C70

rmaldehydesulphoxylic acid sodium salt, detmn., voltamm., 2C70, 4C71
rmamide, sepn. from related compounds, by g.c., 3C24
dimethyl-, detmn. of dimethylamine, dimethylammonium formate and formic acid in, potentiom., 4C95
of H_2O in, conductim., 4C3
epn. from related compounds, by g.c., 3C24
***N*-methyl-,** sepn. from related compounds, by g.c., 3C24
rmate, detmn. in biol. fluids, enzymic - fluorim., 3D63
in copper-plating soln., with use of Dohrmann DC-50 total-org.-C analyser, 2B33
rmic acid, detmn. in dimethylformamide, potentiom., 4C95
in industrial wastes, by g.c., 3H47
in oxidation products of carbohydrates, by n.m.r., 2C16
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
dimethylammonium salt, detmn. in dimethylformamide, potentiom., 4C95
methyl ester, detmn. in air, by g.l.c., 5H16
in presence of dimethoxymethane, formaldehyde and methanol, by g.c., 3C15
rmic acid, chloro-, benzyl ester, detmn. in presence of its degradation products, by n.m.r., 3C32
, oxydi-, diethyl ester, detmn., spectroph. or enzymic - spectroph., 2D159
rmononetin, sepn. from other oestrogens, gel chrom. - paper chrom., 4D48
angula bark, detmn. of chrysophanol and frangula emodin in preparations of, by t.l.c. - spectroph., 1E13
Fructofuranosidase, see under *Enzymes, specific*
uctose, detmn., spectroph., 4D33
in honey, by g.l.c., comparison of derivatisation methods for, 4F13
in presence of other carbohydrates, by t.l.c. - densitom., 3C13
in sugar products, enzymic, 6F7
in wine, by h.p.l.c., 5F57
dentn. in pharmaceutical preparations, by t.l.c., 1E50
dentn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
in tropical fruit products, by t.l.c. - g.l.c. of trimethylsilyl deriv., 5F34
sepn. from other carbohydrates, liquid chrom., 1D41
and identn., by g.l.c. - m.s. of trimethylsilylated butaneboronate deriv., 6C20
uit, see also *Apples*; *Bananas*; *Citrus fruit*; *Pineapples*; *Strawberries*
detection and detmn. of carbaryl, methiocarb and propoxur in, by t.l.c. and g.l.c., 4G37
detmn. of captafol, captan and quinomethionate in, by g.l.c., 2G30
of Co, Mn and Zn in wild, polarogr., 4F2
of dicofol in, by h.p.l.c., 2G29
of dietary-fibre content of, enzymic - gravim., 5F4
of oil content of, by ring-oven method, 5F62
of sorbic acid in, colorim. or u.v. spectroph., g.l.c. analysis of substances interfering in, 5F58
dentn. and detmn. of sugars in tropical, by g.l.c. of trimethylsilyl deriv., 2F30
sepn. and detmn. of carbamate pesticides in, by t.l.c. - enzymic, 2G34
Fruit juices, see also *Apple juice*; *Blackcurrant juice*; *Cherry juice*; *Citrus-fruit juice*; *Grape juice*; *Redcurrant juice*
detection and detmn. of maltol and ethylmaltol in, by t.l.c., 1F4
detmn. of ascorbic acid in, volum., 5E27, 6F29
of *N*-nitrosamines in, by g.c., 6F5
Fruit products, detmn. of aflatoxin B_1 in, by t.l.c., 6F6
of sorbic acid in, colorim. or u.v. spectroph., g.l.c. analysis of substances interfering in, 5F58
identn. and detmn. of sugars in tropical, by t.l.c. - g.l.c. of trimethylsilyl deriv., 5F34
Frusemide, detmn. in blood serum or urine, by h.p.l.c., 3D48
Fucose, detmn., enzymic - spectroph., 6F10
spectroph., manual and automated procedures for, 6C21
Fuel gases, see also *Coal gas*
detmn. of H_2S in natural, by g.l.c., 5C44
of tetrahydrothiophen in, by g.l.c., 5C45
of H_2O in natural, by g.l.c., 1C60
by g.s.c., 1C59
Fuel oil, detmn. of Bunker C, in marine organisms, liquid chrom. - g.l.c., 4F10
of S in, X-ray emission spectrom., 6B208
of trace metals in, by a.a.s. and flame emission spectroph., 6C65
of V in gas-turbine, spectroph., 3C46
Fuels, see also *Coal*; *Fuel gases*; *Petroleum*; *Petroleum products*
analysis of fossil or nuclear, by m.s., 2A7*C*
Fulvic acids, Curie-point pyrolysis - g.c. study of, 4C77
detmn. in water, 4H35
Fumaric acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
in presence of citric, malic and succinic acids, paper chrom. - photom., 1D42
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
— **di-iso-octyl ester,** detmn., polarogr., 5C15
Functional-group analysis, by ^{13}C n.m.r., 5C10
2-Furaldehyde, detmn., spectroph., 4C48
of H_2O in technical-grade, by electrom. titration, 6C57
Furan, detmn., by g.l.c., 2C30
—, **2-t-butyltetrahydro-,** sepn. of *cis-* and *trans-*isomers of, by circulatory g.l.c., 1C31

G

Gadolinium, concn., with use of three-phase extraction system, 1B11
detmn., gravim., 5B102
spectrogr., effect of NaCl carrier in, 5B94
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in rare-earth concentrates, by n.a.a., 6B85
in scandium oxide, by luminescence method, 5B92
in uranium, X-ray spectrom., 4B63
Gadolinium, reagent for, 3-nitro-*N*-*m*-tolylbenzohydroxamic acid, 5B102
Gadolinium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Gadolinium oxide, detmn. of Tb in mixtures with La and Y oxides of, fluorim., 6B89

Galactose, detmn. in presence of other carbohydrates, by t.l.c. - densitom., 3C13
sepn. from other carbohydrates, liquid chrom., 1D41
and identn., by g.l.c. - m.s. of trimethylsilylated butaneboronate deriv., 6C20
β-Galactosidase, see under *Enzymes, specific*
Galacturonic acid, detmn. of unconjugated, fluorim., 2D59
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
Gallic acid esters, detection in fats and fatty oils or in feeding-stuffs, colour reaction for, 4G11
Gallium, concn., with use of three-phase extraction system, 1B11
detmn., by thermom. titration, 6B5
complexom., 5B90
photom., 6B73
spectroph., 4B44
in air-borne dust, emission spectrom., 4H4
in aluminium, by n.a.a., 2B57
fluorim, 1B57
in biol. tissues, anodic-stripping voltamm., 2D11
in boric acid, by electrolysis - spectrogr., 5B85
in cadmium, spectroph., 1B48
in gold, spectroph., 4B31
in plutonium, spectrogr., 6B105
in presence of Al, spectroph., 2B59
in sediments, *in situ* X-ray emission spectrom., 6H25
spectrogr., 2H17
in semiconducting materials, oscillopolarogr., 3B64
in tin, by n.a.a., 5B124
in water, spectrogr., 1H24
of As in, a.c. stripping polarogr., 6B149
polarogr. study of, 6B74
sepn. from Al, Cd, Au, In and Sc, by ion exchange, 1B2
from Al, In and Tl, liquid chrom., 6B72
from Pt-group metals, by solvent extraction, 5B210
solvent extraction of, with β-diketones, 1B7
with diphenylguanidine - glycinecresol red, 6B71
with petroleum sulphoxides, 2B61
Gallium, reagents for, 8-mercaptoquinoline, 1B57
4-methyl-2-(2-hydroxy-1-naphthylazo)thiazole, 6B73
Rhodamine B, 4B31
salicylaldehyde isonicotinoylhydrazone, 2B59
sulphonitrazo E, 4B44
Gallium alloys, detmn. of Ge in, coulom., 5B122
Gallium arsenide, detmn. of O adsorbed on surfaces of, by laser sampling - m.s., 5B8
Gallium bromide, g.l.c. study of, 1B5
Gallium chloride, detmn. of $SbCl_3$ in, by g.l.c. - a.a.s., 3B65
of As in, a.c. stripping polarogr., 6B149
g.l.c. study of, 1B5
Gallium complexes, with 5-ethylamino-2-(2-pyridylazo)-*p*-cresol or 5-diethylamino-2-(2-pyridylazo)phenol, 2B60
with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
Gamma-BHC, see *Gamma-HCH*
Gamma-HCH, detection in wood, by t.l.c., 3C70
detection and detmn. in tinctures or extracts, by t.l.c., 4E47
detmn., by g.l.c., 4J31
Gardona, see *Tetrachlorvinphos*
Gas oil, characterisation of aromatic hydrocarbons in, u.v. spectroph., 2C58
Gases, see also *Exhaust gases*; *Fuel gases*; *Stack gases*
analysis, by g.c. - spectrogr., with use of labelled isotopes, 5B13
i.r. emission spectroph., 2A1*C*
automatic measuring device for, 6J3
detmn. of combustible, device for, 1J3
of impurities in, by equilibrium-concn. method, 6H15
of toxic, with use of Fourier multiplex spectrometer, 2A1*C*
device for preparation of standard mixtures of condensible, 1J2
sepn. and detmn. of mass and radioactivity of fermentation, g.c. system for, 2D13
system for precision dispensation of, 5J5
for supply of constant-composition mixtures of, 1J1
travelling-mercury-drop flow meter for, 4J3
Gasoline, see *Petrol*
Gelatin, B.S.I. methods for sampling and testing, 1C61
Genistein, sepn. from other oestrogens, gel chrom. - paper chrom., 4D48
Gentamicin, detmn., polarim., and study of stability of soln. of, 2E18
Gentian root, chemical evaluation of, 3E16
Germanate, detmn., by indirect a.a.s., 5B22
Germanium, detmn., by a.a.s., with atomisation on tantalum carbide, 6B113
coulom., 2B80, 5B122
fluorim., 6B122
photom., 6B122, 6B123
spectroph., 2B17, 6B124
X-ray emission spectrom., diluent effects in, 1B14
in arsenic, spectroph., 5B143
in presence of As, automated potentiom., 2B97
of other elements, spectroph., 5B121
in sediments, *in situ* X-ray emission spectrom., 6H25
of Cd, Cu, Pb and Zn in, stripping voltamm., 6B126
of O in, by α-activation, 3B90
of O adsorbed on surfaces of, by laser sampling - m.s., 5B8
sorption of, on modified ion-exchange resin, 6B125
Germanium, organic compounds of, characterisation, by g.l.c., 6C38
Germanium, reagents for, alizarin complexan, 6B124
- rhodamine dyes, 6B123
- Rhodamine 6G, 6B122
Brilliant green - 3,5-dinitrocatechol, 5B143
8-(2-carboxyphenyl)-2,6,7-trihydroxyxanthen-3-one and its ethanediol ester, 2B17
diphenylguanidine - quinalizarin, 5B121
2,6,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
Germanium alloys, Ge - Se - Te, detmn. of Cd, Cu, Pb and Te in, stripping voltamm., and of base elements in, gravim., 6B126
Germanium tetrabromide, g.l.c. study of, 1B5
Gibberellins, sepn. and detmn. of free acids or their methyl esters or glucosides, by g.l.c. or trimethylsilyl deriv., 2G19
Gilding electrolytes, detmn. of Au in, polarogr., 6B50
Glass, analysis, thermom. methods for, 5A6*C*
comparison of samples of, by n.a.a., 2A10
detmn. of Al in, spectroph., 5B87

ass, determination—*continued*
of Ca in alkali calcium silicate, by thermom. titration, 4B171
of elements in, by n.a.a., 6B236
X-ray spectrom., inter-element effects in, 4B173
of Pb in lead silicate, 6B235
of Ni in, by photon activation, 2B149
of P in silicophosphate, spectrogr., 1B177
of rare-earth metals in, complexom., optimum conditions for, 6B232
of Ti in, photom., 1B92
of trace metals in lead silicate, by a.a.s., 6B234
of transition elements in fibres of high-purity, spectrogr., 3B172
identn. of fragments of, by n.a.a., 1B176
m.s. study of, 2A1*C*
spectral analysis in control of raw materials and products of manufacture of, 6B233
Globulin, detmn. of polyoxyethylene glycol in soln. of, spectroph., 1D83
Glucaric acid, detmn. in urine, enzymic, effect of *in vitro* pH changes in, 2D65
uconic acid calcium salt, detmn., spectroph., 1E51
uconolactone, detection and detmn. in baking powder, by g.l.c. of trimethylsilyl deriv., 2F33
ucoproteins, assay of formation from uridine diphosphoglucose of, radiom., 1D89
ucose, detmn., enzymic - enthalpim., 1D38
enzymic - spectroph., with use of immobilised enzymes, 3D1
spectroph., 4D33
in biol. fluids, spectroph., prevention of interference in *o*-toluidine method for, 3D56
in blood, enzymic, comparison of end-point and reaction-rate method for, 4A1*C*
in blood or blood plasma, correlation of whole-blood and plasma values, 1D39
in cerebrospinal fluid or urine, spectroph., 3D55
in honey, by g.l.c., comparison of derivatisation methods for, 4F13
in presence of other carbohydrates, by t.l.c. - densitom., 3C13
in sugar products, enzymic, 6F7
in wine, by h.p.l.c., 5F57
of specific activity of ^{14}C-labelled, in blood, liquid chrom. - liquid scintillation counting - enzymic, 2D57
identn. in pharmaceutical preparations, by t.l.c., 1E50
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
in tropical fruit products, by t.l.c. - g.l.c. of trimethylsilyl deriv., 5F34
sepn. from other carbohydrates, liquid chrom., 1D41
and identn., by g.l.c. - m.s. of trimethylsilylated butaneboronate deriv., 6C20
, 2-acetamido-2-deoxy-, detmn., with its 6-phosphate, in presence of its 2-amino-analogue, spectroph., 6C22
, 2-amino-2-deoxy-, detmn., with its 6-phosphate, in presence of other amines, spectroph., 6C22
ucose oxidase, see under *Enzymes, specific*
ucose-6-phosphate dehydrogenase, see under *Enzymes, specific*
ucosiduronic acids, paper-chrom. study of steroidal, 2D82
ucuronic acid, detmn. of unconjugated, fluorim., 2D59
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
Glutamate oxaloacetate aminotransferase, see *Enzymes, specific,* aspartate aminotransferase
Glutamate pyruvate aminotransferase, see *Enzymes, specific,* alanine aminotransferase
Glutamic acid, detmn. in foods, ion-exchange chrom. - potentiom., 3F17
sepn. from asparagine, aspartic acid, glutamine, glycine, serine and threonine, by t.l.c., 3D97
—, ***N*-(4-aminobenzoyl)-,** detmn. in presence of folic acid, by t.l.c. - spectroph., 5E26
Glutamine, sepn. from asparagine, aspartic acid, glutamic acid, glycine, serine and threonine, by t.l.c., 3D97
γ-Glutamyl transpeptidase, see under *Enzymes, specific*
γ-Glutamyltransferase, see under *Enzymes, specific*
Glutaric acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
—, **2-oxo-,** detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
Glutathione, detmn., volum., 4D57
d.c., a.c. and differential-pulse polarogr. studies of, 1E49
—, **reduced,** detmn. in biol. tissues or blood, enzymic - spectroph., 5D73
Glutathione dehydrogenase (ascorbate), see under *Enzymes, specific*
Glyceraldehyde, detmn., comparison of volum. methods for, 4C18
Glycerides, analysis, by h.p.l.c., 6C67
detmn. in lipid mixtures, by h.p.l.c., 5F65
sepn. and detmn., by t.l.c. - densitom., statistical study of results in, 3F41
—, **di-,** analysis, by g.l.c. of trimethylsilyl deriv., 4F35
sepn. of galactosyl, by g.l.c. of trimethylsilyl deriv., and sepn. of deacylation products of, by t.l.c., 1D50
—, **tri-,** analysis, by h.p.l.c., review, 3D70
of branched-chain fatty acids in, by g.l.c. of methyl esters, 5D48
characterisation and identn., i.r. spectroph., 2F46
detection of acetodiacyl, in milk-fat lipids, by g.l.c. or t.l.c., 3F12
detmn., automated enzymic, 4A1*C*
in blood plasma or blood serum, by automated g.l.c., 3D73
in blood serum, enzymic - volum., 2D77
identn. and detmn., by g.l.c., review, 5F67
sepn., by t.l.c., 3F40
Glycerol, detmn. in flavour bases or flavoured wines, by g.l.c., 5F39
in presence of other polyols, by g.l.c., 3C74
in wine, by h.p.l.c., 5F57
sepn. from other alcohols, by h.p.l.c., 2C14
Glyceryl trinitrate, detmn., volum., 6C96
in air, by isotope dilution - m.s., 5H17
in pharmaceutical preparations, by kinetic - colorim. method, 2E34
polarogr., 5E40
in propellents, by h.p.l.c., 4C96
identn. in smokeless powders, by t.l.c., 1C85
Glycine, detmn., polarogr., 5D69
sepn. from asparagine, aspartic acid, glutamic acid, glutamine, serine and threonine, by t.l.c., 3D97
—, **phenyl-,** identn. in cephalexin, by t.l.c., 5E24
—, ***N*-(phosphonomethyl)-,** see *Glyphosate*
—, **suberyl-,** g.c. - m.s. study of excretion of, 4A1*C*

Glycine derivatives, sepn. of mono-, di- and tri-L-leucyl-, droplet counter-current chrom., 2D106
Glycocyamine, detmn., spectroph., 3C23
Glycogen, detmn., enzymic - spectroph., filter-paper technique for, 5D38
in biol. tissues, enzymic, destruction of pre-existing glucose for, 4D36
Glycolipids, sepn. of tissue, by t.l.c., 3D74
Glycollaldehyde, detmn., comparison of volum. methods for, 4C18
Glycollic acid, detmn. of ^{14}C-labelled, in leaf tissue, by g.l.c. of methyl ester, 1D44
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
Glycols, see *Diols*
Glycopeptides, sepn. and detmn. of amino-sugars in, by methanolysis - g.l.c. of trimethylsilyl deriv. of *N*-acetyl deriv., 1D40
Glycoproteins, detmn. of amino-sugars and neutral sugars in, ion-exchange chrom. of borate complexes - colorim., 2D130
of neutral carbohydrates in blood-serum, liquid chrom., 5A2*C*
sepn. and detmn. of amino-sugars in, by methanolysis - g.l.c. of trimethylsilyl deriv. of *N*-acetyl deriv., 1D40
Glycosaminoglycans, see *Mucopolysaccharides*
Glycosides, see also *Cardiac glycosides*; *Flavonoid glycosides*
—, **mandelonitrile,** identn., by t.l.c., 4E19, 6E9
—, **methyl,** sepn. and identn., by g.l.c. of methyl ether acetates, 4C17
Glycyrrhetic acid, detmn. in liquorice extract, by t.l.c. - spectroph., 5E19
Glycyrrhizin, detmn. in liquorice root, by t.l.c., 2E13
comparison of methods for, 4E20
Glyoxal, detmn., colorim., stability of soln. used in, 3G40
Glyoxime, dimethyl-, detmn., by chemiluminescence method, 5E4
Glyphosate, detmn., ion-exchange chrom. - spectroph., with use of amino-acid analyser, 4G23
Gold, concn., by co-pptn on $MnO(OH)_2$, 4B15
with use of three-phase extraction system, 1B11
detmn., by a.a.s., with use of micro-probe - flame - adapter atomiser, 3B7
by kinetic - spectroph. method, 2B38
spectroph., 3B46, 5B7, 5B56
stripping chronopotentiom., 5B11
voltamm., 4B30
in aluminium, by a.a.s., 5A5*C*
in biol. fluids, X-ray emission spectrom., 6D7
in biol. materials, by a.a.s , 3D8
in copper, anodic-stripping voltamm., 6B31
by n.a.a., 5B52
in copper or products of its manufacture, anodic-stripping voltamm., 5B48
in cyanide soln., polarogr., 6B51
in gilding electrolyte, polarogr., 6B50
in industrial materials, by X-ray fluorescence analysis, 4B17
in low-grade products, by a.a.s., 6B46
in minerals, ores or rocks, amperom., 2B39, 4B29
anodic-stripping voltamm., 6B31
by a.a.s., 1B37
by cupellation - a.a.s., 5B57
comparison of methods for, 6B45
potentiom., 4B29
reference standard for, 5B209
spectrogr., 5B212
in presence of Cu and Pd, spectroph., 1B172
of other elements, by ion exchange - spectroph. (or complexom.), 6B49
Gold, determination—*continued*
in sediments, *in situ* X-ray emission spectrom., 6H25
in silicates, by a.a.s., 2B77
in tobacco leaves, by n.a.a., 5D7
in water, by a.a.s. or spectrogr., collection in soya-bean curd for, 3H18
by n.a.a., 2H16
spectrogr., 1H24
of impurities in, fluorim. and spectroph., 4B31
sepn. from Al, Cd, Ga, In and Sc, by ion exchange, 1B2
from Hg, by solvent extraction, 5B83, 6B67
from other elements, by solvent extraction, 2B40, 5B58
by solvent extraction - adsorption on chelating resin, 6B48
from Re, electroph., 1B167
from Se or Te, paper chrom. or electrochrom., 6B164
of ^{199}Au from neutron-irradiated platinum, by solvent extraction, 6B228
solvent extraction of, with aliphatic amines, 2B21
with esters of dithiocarbamic acids, 4B2
with *O*-isopropyl ethylthiocarbamate, 2B3
with molten chelating agents, 6B47
with quaternary ammonium nitrates, 6B1
sorption of, on sulphides from acid soln., 4B3
Gold, reagents for, *p*-dimethylaminobenzylidenerhodanine, 5B56
syn-phenyl 2-pyridyl ketoxime, 1B172
'phthalophenone', 3B46
Rhodamine B, 6B49
Rhodamine B ethyl ester, 5B7
Gold alloys, Au - Cu, analysis, X-ray emission spectrom., with use of proton excitation, 6J41
Gold complexes, of $AuCl_4^-$ and *o*-substituted malachite green, 5B55
with thiourea, detmn. of S in, volum., 2B113
Gold ores, detmn. of Au in, amperom., 2B39
Grains, see *Cereals*
Gramicidin, detmn. in fermentation media, spectroph., 4E24
Granite, detmn. of Co, Au, Pb and V in, by a.a.s., 2B77
Granulocytes, assay of adenosine deaminase in, radiom., 2D161
Grape juice, detmn. of NH_4^+ and K^+ in, ion-exchange chrom., 5J17
Grapefruit juice, detmn. of Cl^- in, potentiom., with ion-sensitive electrode, 2F6
of limonin in, by h.p.l.c., 5F35
of trace elements in, by a.a.s., 6J55
Graphite, detmn. of ^3H in, by liquid scintillation counting, 5B27
of H and N in, spectrogr., 5B134
of K in lamellar insertion compounds of, by a.a.s., 2B74
Grasses, see also Festuca ovina
detmn. of Cu in, spectroph., 4B24
of F^- in, comparison of sample-preparation methods for, 5G14
potentiom., with ion-sensitive electrode, 5G15
of NO_3^- in, potentiom., with ion-sensitive electrode, 2G10
sepn., identn. and detmn. of alkaloids in tall fescue or rye-, ion-exchange chrom. - paper chrom. (or t.l.c.) - densitom., 3G18
Griseofulvin, detmn., by g.l.c., collaborative study of, 1E16
Ground-nut meal, detection of aflatoxins in, fluorescence reaction for, 5F14
detmn. of N in, by Kjeldahl method, TiO_2 - $CuSO_4$ catalyst for, 1G11

ound-nut oil, analysis of diacylglycerols in, by g.l.c. of trimethylsilyl deriv., 4F35
ound-nuts, detmn. of Omite in, by g.l.c., 1G22
ıanethidine, h.p.l.c. study of, 2E49
ıanidine, detection, colour reaction for, and detmn., spectroph., 3C23
ıanidine derivatives, analysis of blood-serum, automated ion-exchange chrom. - spectroph., 1D67
detection, colour reaction for, and detmn., spectroph., 3C23
ıanine, detection in cereals, by t.l.c., 3F8
detmn. in malt wort, by h.p.l.c., 1F15
in single-cell protein sources, u.v. spectroph., 5D84
identn. and detmn. in presence of adenine, oscillopolarogr., 4D67
ıanosine, detmn. in blood, blood plasma or plasma fractions, by t.l.c., 2D44
in malt wort, by h.p.l.c., 1F15
ıanosine phosphates, cyclic mono-, detmn. of ^{32}P-labelled, in biol. tissues, scheme for, 3D111
, tri-, binding to ammonium formate during gel filtration of, 4D65
ıar flour, detmn. in protein-rich foods, by pptn., 1F14
ınshot, detection of residues of, by n.a.a., 2A10

H

CH (*mixed isomers*), see also *Gamma-HCH*
detection and detmn., by t.l.c., 4G31
detmn., by g.l.c., 4J31
in cereals or milk, by t.l.c., clean-up procedures for, 3F21
ıemin, detmn., paper chrom. - spectroph., 6D67
ıemocyanins, sepn. of crustacean, gel electroph., staining reagent for, 3D105
ıemoglobin, detmn., inter- and intra-laboratory variations in results of, 2D134
in blood, improved falling-drop method for, 4D63
of mercapto-groups in, amperom., 5D75
tables of amino-acid composition of, 1D79
A_2, detmn., electroph. - colorim., 3D106
electroph. - densitom., 4D64
ıemoglobin, carbonyl-, detmn. in blood, spectroph., 6D33, 6D34
ıfnium, concn., with use of three-phase extraction system, 1B11
detmn., spectroph., 2B17, 3B102
in lanthanum or lanthanum oxide, spectrogr., 1B65
in presence of Zr, by spectroph. titration, 3B96
spectroph., 3B103
in water, by n.a.a., 2H16
in zirconium, by isotope dilution, 2B87
of Hf-to-Zr ratio in zircon, X-ray emission spectrom., 3B100
effect of chemical form on shape of γ-ray spectrum of ^{181}Hf, 1B101
sepn. from Zr and other elements and detmn., with use of diantipyrinylmethane deriv., 1B98
solvent extraction of, with 2-bromobutyric acid, 4B79
with octyl phenylphosphonate, 1B102
ıfnium, reagents for, catechol violet, 3B102
Eriochrome cyanine R, 3B102
4-(2-pyridylazo)resorcinol, 3B103
salicylbisfluorone, 2B17
2,6,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
Hair, comparison of samples of, by n.a.a., 2A10
detmn. of Sb in, by n.a.a., 6D12
of elements in, by a.a.s., 6D4
of Hg in, by n.a.a., 1D8
Halite, detmn. of Th and Zr in, photom., 6B92
Hazards, 3A16*B*
from mixture of acetone with H_2O_2, 4A23
from mixture of oxidising acids with surfactant, 4A22
in inadequate protection afforded by rubber gloves in handling of org. liquids, 4A20
in storage of 'chromic acid', 4A21
method of recognising carcinogenic, 3A13
Heart tissue, sepn. of isoenzymes of creatine phosphokinase and lactate dehydrogenase in, by isoelectric focusing, 6A2*C*
Helium, detmn. in gas mixtures, by titanium-sublimation-pump method, 2B24
of H_2S in, spectroph., 2B25
sepn. from Ar and Kr, by g.c., 3B84
Heparan sulphate, sepn. from other arterial-wall mucopolysaccharides, electroph., 3D57
Heparin, identn., by t.l.c., 5D39
Heptachlor, detmn., by g.l.c., 4J31
Heptachlor epoxide, detmn. in soil, by g.l.c., photochem. induced artefact in, 5G31
Herbicides, detmn., by g.l.c. of 2-chloroethyl esters, 5G26
with their metabolites, review, 3G22
of carbamate and urea, in foods, by g.l.c. of methyl deriv., 5F45
identn., by m.s., review of need for chemical confirmation in, 3G29
particle size analysis of aq. dispersions of, by photo-sedimentation, 5A7*C*
—, **chlorophenoxy-acid,** spectrosc. properties of methyl esters of, 4G21
—, **triazine,** detmn. in medicinal plants, by t.l.c., 1G13
identn. and detmn. in effluents, by g.l.c. or t.l.c., 3H49
Herbs, see *Plants*
Heroin, see *Diamorphine*
Heterocyclic compounds, detection, by t.l.c., 2C29
Hexachlorophane, detmn. in cosmetics, partition chrom. - u.v. spectroph., 4C64
9-Hexadecenoic acid, identn. and detmn. of *cis-* and *trans-*, in tobacco-smoke condensate, by g.l.c. of methyl esters, 2D62
Hexadiphane, detmn. in pharmaceutical preparations, by g.l.c., 6E29
Hexamethylenetetramine, see *Hexamine*
Hexamine, analysis of condensation product with benzylamine of, by m.s., 4C94
detmn., volum., 1E1
Hexane, detmn. of impurities in, by g.c., 3C8
sepn. from its isomers, by g.c., 3J35
sepn. and detmn. of isomers of, in pyrolysis products of propane, by g.l.c., 4C7
Hexane-1,6-diamine, detmn., potentiom., enzyme electrode for, 5J97
Hex-2-ene, sepn. of geometrical isomers of, liquid chrom., 6C17
Hexogen, see 1,3,5-*Triazine, hexahydro*-1,3,5-*trinitro*-
Hexokinase, see under *Enzymes, specific*
Hexoses, 6-deoxy-, detmn., spectroph., manual and automated procedures for, 6C21
Hippuric acid, identn. and detmn. in amniotic fluid, by g.l.c. and g.l.c. - m.s. of pentafluoropropionyl deriv. of methyl ester, 6D43
Histamine, detmn., potentiom., enzyme electrode for, 5J97

Histamine—*continued*
sepn. from other amines, by t.l.c. of dansyl deriv., 3D86
Histidine, sepn. from blood hydrolysates, as 2-chloro-4-(4-hydroxyphenylazo)benzenesulphonate, 2D107
—, **di-iodo-,** sepn. from related compounds, ion-exchange chrom., 2D109
—, **iodo-,** sepn. from related compounds, ion-exchange chrom., 2D109
Histidine decarboxylase, see under *Enzymes, specific*
Histones, detmn., gel electroph. - spectroph., 2D119
differentiation of tissue, liquid chrom. - gel electroph., 2D123
Holmium, detmn. in alkaline-earth-metal fluorides, spectrogr., 6B59
in ytterbium oxide, photom., 6B90
Holmium, reagent for, bromopyrogallol red - hexadecylpyridinium bromide, 6B90
Holmium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Homatropine, detmn. in pharmaceutical preparations, u.v. spectroph., 4E14
Homocystamine, sepn. from other amines and thiodiamines, automated ion-exchange chrom., 1D61
Homocysteine, *S*-adenosyl-, detmn. in biol. tissues, liquid chrom., 5D71
Homolanthionamine, sepn. from other amines and thiodiamines, automated ion-exchange chrom., 1D61
Homovanillic acid, see *Acetic acid, 4-hydroxy-3-methoxyphenyl-*
Honey, assay of amylase in, by Amylochrome kit method, 4F14
spectroph., 6F11
detmn. of fructose and glucose in, by g.l.c., comparison of derivatisation methods for, 4F13
Hop extracts, analysis, simplified extraction method for use in, 2F42
detmn. of α- and β-acid homologues in, by n.m.r., 5F51
Hops, analysis of products of, 4A3*C*
analysis, and analysis of preparations of, extraction method for, 3F27
detmn. of bitter substances in, conductim., evaluation of EBC conductim. method for, 4F29
factors affecting results in, 4F30
of conductim. value of, review of automated and semi-automated methods for, 4F28
h.p.l.c. study of compounds of, 4A3*C*
Hornblende, detmn. of Al, Ca, Fe, Mg, Mn, K, Na and Ti in, X-ray emission spectrom., 3J57
Horse-chestnut, identn. and detmn. of saponins in, by t.l.c. - fluorim., 3E13
Humic acids, detmn. in brown coal or humus, colorim., spectroph. or volum., 2G4
in sea-water, fluorim., 4H34
Humidity, detmn., automatic digital microwave instrument for, 2H7
i.r. spectroph., selection of resonant frequencies for, 6H6
methods and instrumentation for, 3A1*C*
Humulone, detmn. in hop extracts, by n.m.r., 5F51
Humus, detmn. of humic acids in, colorim., spectroph. or volum., 2G4
Hyaluronic acid, sepn. from other arterial-wall mucopolysaccharides, electroph., 3D57
Hyaluronidase, see under *Enzymes, specific*
Hydantoin, 5-(4-hydroxyphenyl)-5-phenyl-, detmn. in blood, by g.l.c., 5D18
Hydrallazine, h.p.l.c. study of, 2E49
Hydrazide-nitrogen, detmn. in peptide hydrazides, bromatim., 5D74
Hydrazine, detmn., amperom., 4B85
iodim., by amplification reactions, 4B84
spectroph., 4B86
—, **phenyl-,** detmn., by chemiluminescence method, 5E4
Hydrazones, 2,4-dinitrophenyl-, effect of r.h. on t.l.c. behaviour of, 5C27
Hydrocarbons, see also *Alkanes; Alkenes; Petroleum*
analysis of pyrolysis products of, by g.l.c., 3C50
characterisation of petrol, by g.c., 3C51
by h.p.l.c., 3C49
by n.m.r., 6C61
of petroleum, by h.p.l.c., 3C48
detmn. in air, continuous-monitoring instrument for, 6H16
review, 3H1
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in steam condensate, by g.c., 5J25
in water, by vapour-phase extraction - g.c., 2A4*C*
of low-mol.-wt., in air, by g.c., review, 3D50
identn., by g.l.c., 5C2
by temp. coeff. of g.l.c. retention indices, 5C42
in pyrolysis products of methane, by g.c., 6C13
monitoring of low concn. of, 5A3*C*
sepn., by g.l.c., comparison of stationary phases for, 3J38
of isomeric unsaturated, by h.p.l.c., 3J11
sepn. and detmn. in sediments or sea-water, by g.l.c. - m.s. or h.p.l.c., 6H51
—, **alicyclic,** g.l.c. study of, 1C53
—, **aliphatic,** detmn. of straight-chain, in presence of their branched-chain isomers, by g.l.c., 6C12
g.l.c. study of, 1C53
—, —, **C_{22} to C_{33},** identn. in *Convolvulus pluricaulis,* by t.l.c. - g.l.c., 3E18
—, **aromatic,** analysis of impurities in, by g.c., with concn. by zone melting, 6C40
characterisation of gas-oil, u.v. spectroph., 2C58
detection, by t.l.c., 2C29
detmn. in medium mineral oils, u.v. spectroph., 1C55
sepn. from org. sulphides, liquid chrom., 1C56
—, —, **chloro-,** atmospheric-pressure ionisation m.s. study of, 3G37
—, **C_1 and C_2, chloro-,** detmn. in chlorination products of methane, by g.c., 1C17
—, **C_1 to C_5,** analysis of mixtures of, with H, by g.s.c., system for, 1C16
—, **C_3 to C_5,** analysis, by g.c., 5C43
—, **C_4,** sepn., by g.s.c., 4C6
—, **C_{12},** sepn. and identn. in cyclohexylbenzene, by g.l.c., 3C30
—, **chloro-,** identn. and detmn. in air, by g.c. - m.s., 6H17
—, **halo-,** detmn. in water, by g.l.c., 5H36
—, **perfluoro-,** sepn., by g.l.c., comparison of stationary phases for, 3J38
—, **polycyclic,** analysis of tar-volatile samples of, 2A7*C*
characterisation of content of high-protein foods, oils and fats of, by g.l.c., 2F16
detmn. in environmental materials, by computerised g.c. - m.s., 6A1*C*
in meat products, clean-up method for, 5F27
in sediments or water, by g.c. - m.s., 2A4*C*
by t.l.c. - fluorim., 1H38
in water, by g.l.c. - m.s., 3H39

drocarbons, polycyclic, determination—*continued*
in white petroleum products. liquid chrom. - fluorim. (or phosphorim.), 6C63
of isomeric, in air-borne dust, by t.l.c. - fluorim., 4H15
.p.l.c. study of, 3C36
dentn. in tobacco smoke, liquid chrom. - g.l.c. scheme for, 2D74
eport of symposium on chemistry, occurrence and measurement of, 5A1
epn., by h.p.l.c., 1C47
epn. and detmn., by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
epn. and identn. of carbon-black adsorbates, scheme for, 1H21
drochlorothiazide, detmn. in blood or blood plasma, by g.l.c. of tetramethyl deriv., 3D47
in blood cells, blood plasma or urine, by g.l.c. of tetramethyl deriv., 6D32
in pharmaceutical preparations, polarogr., 6E38
.p.l.c. study of, 2E49
drocortisone, detmn., by protein-binding method, relative competition of related compounds in, 6D52
spectroph., 3E26
luorescence reaction of, 1E17
solation and characterisation of glucuronide-conjugated metabolites of, in urine, 5D60
11-deoxy-, protein-binding study of, 6D51
drogen, see also *Deuterium*; *Tritium*
calculation of H^+ concn. at high ionic strength from potentiom. pH measurements, 3J81
detmn. in chlorination products of methane, by g.c., 1C17
in exhaled air, by g.s.c., 5D4
in gas mixtures, by g.c. - spectrogr., 5B13
by g.s.c., with use of para-hydrogen as carrier gas, 1B20
coulom., 1B21
with C_1 to C_5 hydrocarbons, by g.s.c., system for, 1C16
in lithium, by m.s., 2B28
in org. compounds, see under *Organic elementary analysis*
in refractory materials, by g.s.c., 3B20
in silicates, with ion micro-probe, 4B70
in titanium or titanium alloys, spectrogr., 6B137
in zirconium or zirconium alloys, spectrogr., 6B137
of C-to-H ratio in gasoline, by n.m.r., 6C61
of H_2S in, spectroph., 2B25
of org., in oil shales, by low-temp. ashing - gravim., 4C55
dentn. in pyrolysis products of methane, by g.c., 6C13
sotopic analysis, Raman spectrom., 3B25
epn. from Ar, Kr, O and Xe, by g.c., 3B84
drogen carbonate ion, detmn. in leaves, manom., 1D12
in water, by pH-change method, 2H28
drogen chloride, detmn. in aq. soln., potentiom., 2B7
in chlorination products of methane, by g.c., 1C17
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in presence of weaker acids, potentiom., 3A8
olvent extraction of, with tributyl phosphate from alcohol or acetone soln., 1B76
drogen cyanide, detmn. in air, with collection on filter-paper, 4H9
in combustion effluent, by g.l.c., 6H7

Hydrogen cyanide, determination—*continued*
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in pyrolysis products of N-containing polymers, u.v. spectroph., 5C54
Hydrogen ion, detmn. in presence of Cl^-, Cl and HOCl, volum., 4B130
Hydrogen peroxide, detection and detmn., by t.l.c., 1B22
in uperised milk, test tablets and enzymic method for, 4F22
detmn., amperom., 1B23
potentiom., electrode for, 2J137
in presence of org. peroxides, spectroph., 4B21
explosion hazard from mixture with acetone of, 4A23
Hydrogen sulphide, detmn., pulse polarogr., 5C19
in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
by g.l.c., 5H8
in gas mixtures, by g.c., 4J30
from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
in helium or hydrogen, spectroph., 2B25
in natural gas, by g.l.c., 5C44
in petroleum products, controlled-current coulom., 3C47
g.c. sensitivity coeff. of, 5B157
g.l.c. study of, 3C26
Hydrogen sulphite ion, detmn., fluorim., 2B112
in flue gases, iodim., 5H9
Hydroperoxide, dodecyl, detmn. in industrial wastes, polarogr., 6H53
Hydroquinone, see *Quinol*
Hydroxide ion, detmn. in water, by pH-change method, 2H28
Hydroxyatrazine, detmn. in soil, by g.l.c. of methyl deriv., 1G14
2-Hydroxybutyrate dehydrogenase, see under *Enzymes, specific*
Hydroxy-groups, detmn. in epoxy-resins, i.r. spectroph., 4C85
in highly substituted cellulose ethers, i.r. spectroph., 1C9
in polyhydric compounds for polyurethan production, comparison of methods for, 4C79
Hydroxylamine, detmn., potentiom., 5B132
in water, gravim., 6H36
Hydroxylamine derivatives, detmn. of aliphatic primary, by g.l.c., deriv. formation for, 4A2*C*
Hydroxyzine hydrochloride, detmn. of H_2O in, coulom., 2E2
Hyoscine, detmn. in *Duboisia* leaves, by g.l.c., 6E7
in pharmaceutical preparations, u.v. spectroph., 4E14
in solanaceous plants, by g.l.c. or spectroph., 4E15
h.p.l.c. study of, 4E36
identn. in pharmaceutical preparations, i.r. spectroph., 4E16
sepn. from atropine, emetine and strychnine, paper chrom., 2E4
Hyoscyamine, detmn., and detmn. of *N*-butyl analogue of, in pharmaceutical preparations, u.v. spectroph., 4E14
in *Duboisia* leaves, by g.l.c., 6E7
in solanaceous plants, by g.l.c. or spectroph., 4E15
h.p.l.c. study of, 4E36
Hyperoside, detmn. in *Euphorbia* spp., by t.l.c. - spectroph., 1E12
Hypochlorous acid, detmn. in presence of Cl^-, Cl and H^+, volum., 4B130

α-Hyponitrate, detmn., amperom. or a.c. or d.c. polarogr., 5B133
Hypophosphorous acid, detmn. in oxidation products of phosphorus, volum., 5B137
Hypoxanthine, detmn., enzymic, with use of pO_2 electrode, 3D113

I

Ibuprofen, g.c. - m.s. study of metabolism of, 4A1*C*
Ice-cream, detmn. of chloramine T in, by g.l.c., as benzoic acid, 3F13
Ilmenite, detmn. of Cr, Cu and Mn in, by a.a.s., 1B95
Imidazole, 2-mercapto-1-methyl-, see *Tapazole*
—, **4-methyl-,** detmn. in caramel, by g.l.c. of acetyl deriv., 6F22
Imidazole derivatives, halonitro-, sepn., identn. and detmn., by t.l.c. - polarogr., 5C38
Imidazolidin-2-one, detmn. in reaction products of ethylenediamine and urea, by t.l.c. - densitom., 6C29
Imipramine, detmn., fluorim., 1E33
in blood plasma, by g.l.c. - m.s., 4D25
Indicators, acid - base, 3-(arylsulphonyl)-2,4-dimethyl-3*H*-1,5-benzodiazepine deriv., 1A3
5-hydroxyindole-2-carboxylic acid, 6A12
nitrophenoxazine dyes, 3A7
Indicators, adsorption, 3-(3,5-dibromo-2,4-dihydroxyphenyl)-4,5-dimethoxyphthalide, 3B132
Rose Bengal, 2E6
Indicators, metallochromic, aluminon, 1B135
3-diethylamino-2-[3-(1-methyl-2-piperidyl)-2-pyridylazo]phenol, 1B61
diphenylcarbazide, 6B65
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
5,5′-methylenedi(salicylic acid) - Fe^{III}, 6B79
1,2-naphthaquinone-4-sulphonic acid 2-thiosemicarbazone, 6B4
orthanilic K, 2B113
phenanthraquinone monothiosemicarbazone, 1A6
sulphonazo III, 2B113
2,3,4-trihydroxybenzenesulphonic acid, 6B60
tropolone, 1B159
Indicators, metallofluorescent, 2-hydroxy-1-naphthaldehyde benzoylhydrazone, 1B27
8-hydroxyquinoline-5-sulphonic acid, 2B46
Indicators, redox, brilliant cresyl blue or gallocyanine, for $K_2Cr_2O_7$ titrations, 1A5
cacotheline, 1B26
diethazine hydrochloride, for vanadim. titrations, 4A14
5-hydroxyindole-2-carboxylic acid, 6B148
Nile Blue, for cerim. titrations, 1A4
N-nitrosodiphenylamine, for cerim. titrations, 4A13
N-phenylanthranilic acid, 2A18
Indium, concn., with use of three-phase extraction system, 1B11
detection of ^{113}Sn in indium-113*m*, by colour reaction or γ-spectrom., 6E40
detmn., by a.a.s., 6B75
interferences in, 3B33, 6B76
by thermom. titration, 6B5
complexom., 5B90
indicator for, 6B79
spectroph., 1B59, 2B17, 3B66, 4B52, 5B7
extraction - flotation sepn. method for, 6B77
stripping chronopotentiom., 5B11
in air-borne dust, by n.a.a., 6H5
in cadmium, spectroph., 1B48
in gold, fluorim., 4B31
Indium, determination—*continued*
in presence of Al, spectroph., 2B59
of Cd or Pb, polarogr., 6B14
in tin, by n.a.a., 5B124
spectrogr., 6B131
in water, spectrogr., 1H24
of impurities in, spectrogr., 1B60
of radiochemical purity of ^{113m}In-containing pharmaceutical products, by t.l.c., paper chrom. or γ-spectrom., 3E45
of Ag in, spectroph., 3B45
sepn. from Al, Cd, Ga, Au and Sc, by ion exchange, 1B2
from Al, Ga and Tl, liquid chrom., 6B72
from Sb or Sn, by solvent extraction, 6B130
from Cd, Co, Cu, Hg and Zn, by ion exchange, 1B2
from Fe, by solvent extraction, 1B7
from other elements, by g.s.c., 3B83
by ion exchange, 6B78
from Sn, paper chrom., 6E40
solvent extraction of, with aliphatic amines, 2B21
with β-diketones, 1B7
with diphenylguanidine - glycinecresol red, 6B71
with metal dithiocarbamates, 5B1
with 1-(2-pyridylazo)-2-naphthol - ReO_4^-, 4B13
Indium, reagents for, Astrazone blue B, 4B52
9-(2-carboxyphenyl)-2,6,7-trihydroxyxanthen-3-one, 2B17
gallein, 1B59
8-hydroxyquinoline, 4B31
pyrogallobenzein, 6B77
Rhodamine B ethyl ester, 5B7
salicylaldehyde isonicotinoylhydrazone, 2B59
Victoria blue, 3B66
Victoria Pure blue BO, 3B66
Indium alloys, detmn. of Ge in, coulom., 5B122
Indium complexes, with 5-ethylamino-2-(2-pyridylazo)-*p*-cresol or 5-diethylamino-2-(2-pyridylazo)phenol, 2B60
with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
Indium compounds, detmn. of O in, gravim., 3B67
Indolamine derivatives, sepn., artefact arising in Lindqvist method for, 5D63
Indole derivatives, sepn., artefact arising in Lindqvist method for, 5D63
Indole-2-carboxylic acid, 5-hydroxy-, as acid - base indicator, 6A12
as redox indicator, 6B148
Indomethacin, detmn. in blood plasma, by h.p.l.c., 6D23
Industrial wastes, analysis, review of methods used in coal-gas-production industry, 3C58
sample preservation for, 3H45
of fatty acids and resin acids in pulping-mill, by g.l.c. of methyl esters, 2H46
of paper- and pulp-industry, scheme for, 5H42
of plasticiser-plant, potentiom., 5H44
books on, 6H57*B*
characterisation of Savannah River nuclear-plant sludges and supernates, 2A7*C*
continuous monitoring of, with ion-sensitive electrodes, 4A4*C*
correlation of BOD_5 and COD values of sugar-factory, 4H44
detmn. of acetic and formic acids in, by g.c., 3H47
of Al in, spectroph., 3H46
of $Al(OH)_4^-$, CrO_4^-, NO_3^-, NO_2^-, PO_4^{3-} and SO_4^{2-} in radioactive, laser - Raman spectrom., 4H37
of Am, Cm and Pu in chemical-processing-plant, 2A7*C*

strial waste, determination—*continued*
of ammonia-, nitrate- and org. N in, potentiom., with NH_3-sensing electrode, 4H24
of anionic surfactants in, colorim., ion-exchange clean-up method for, 3H43
of anionic or cationic surfactants in, by two-phase titration, 4H47
of benzene, thiophen and its chloro-deriv. and toluene in, by g.l.c., 5H43
of Br^- in mixed effluents, iodim., 1H45
of CO_3^{2-} in, as CO_2, thermal conductim., 1H44
of COD of, semi-automated spectroph., 3H30
of COD of paper- and pulp-industry, by rapid permanganate test, 5H41
of CN^- in, 2A4*C*
by indirect tensamm. titration, 6B109
spectroph., 2H29
with use of edta for complex decomposition, 2H30
of edta in, by g.l.c. of ethyl ester, 3H37
of elements in, by a.a.s., review of atomisation techniques for, 5J49
of $Fe(CN)_6^{3-}$ and $Fe(CN)_6^{4-}$ in, spectroph., 6B112
of F^- in, colorim., interference by SO_4^{2-} in SPADNS method for, 2H38
of Fe in power-station effluents, by a.a.s., 4H41
of hydroxybenzoic acids and phenol in, by g.l.c. of methyl deriv., 6H54
of Hg in, emission spectrom., 4H39, 5B80
of Hg in org. form in, by a.a.s. 2F3
of morpholine in, spectroph., 4H46
of NO_3^- and 2,4,6-trinitroresorcinol in, u.v. spectroph., 2H47
of N in inorg. form in, by reduction - potentiom., with air-gap electrode, 5H25
of non-ionic surfactants in, by t.l.c., 2H45
of oils in, fluorim., 5H39
of org. C in purified effluents, as CO_2, thermal conductim., 1H46
of org. compounds in, by g.c., 1H47
pre-concn. method for, 5H33
of org. compounds in polymer-plant, polarogr., 6H53
of phenol in, continuous u.v. spectroph., 3A1*C*
of phenols in, colorim., t.l.c. study of effect of presence of amines in, 1H48
of polythionates and $S_2O_3^{2-}$ in, by h.p.l.c. - fluorim., 2H35
of SO_4^{2-} in, automated spectroph., 2H34
isinfection, 3H50*B*
xtraction of Zn from electroplating-plant, by ion exchange, 4H38
dentn. and detmn. of triazine herbicides in, by g.l.c. or t.l.c., 3H49
reservation of samples of, 2A4*C*
ceroids in, 4A4*C*
rganic analysis, applications of g.c. methods in, 2A1*C*
g. reagents in, 6B240*B*
rganic compounds, detmn., non-aq. redox - mercurim., 6B6
sitol hexaphosphate, identn. in cereals or oilseeds, 5G3
ect chemosterilants, detmn., review, 3G50
rumental analysis, conversion of multi-channel analyser into analogue signal averager, 5J8
mpact of calculator chips on design of instruments for, 2A1*C*
dotter for recording data stored in multi-channel analyser in a point-plot mode, 2J5
pport of symposium on, 3A1, 3A14*B*

Instrumental analysis—*continued*
use of state-variable active filters as differentiators, rate-meters and end-point locators in, 2A1*C*
Insulating materials, B.S.I. methods of test for inorg. thermal, 3B173
comparison of samples of mineral wool, microsc., 4B174
Insulin, analysis, by isotachophoresis, 6A2*C*
Interferometry, i.r. instrument for, with scanned aperture, 2J96
Iodate, detmn. in presence of I^-, spectroph., 1B129
sepn. from I^-, IO_4^-, Te^{IV} and Te^{VI}, by t.l.c., 6B187
from I^-, TeO_3^{2-} and TeO_4^{2-}, liquid chrom., 6B170
Iodide, detmn., argentim., improvement of end-point in, 3B133
indicator for, 3B132
by indirect a.a.s., 3B134
by photom. titration, 4B133
coulom., 1B127
potentiom., ion-sensitive electrodes for, 1J73, 3J85
pulse polarogr., 2B110
spectroph., 1B128, 2B12
in phosphates, in presence of other halides, potentiom., with ion-sensitive electrode, 4B92
in presence of Br^-, thermom., 5A6*C*
of Br^- and Cl^-, by reaction with N_2O_4 - volum., 1B126
of Br^-, Cl^- or SO_4^{2-}, spectroph., 1B129
in soil, by kinetic - spectroph. methods, 5G7
in water, potentiom., with ion-sensitive electrode, 5H32
of sol., in silver iodide, by kinetic method, 5B54
sepn. from Br^- and Cl^-, ion-exchange chrom., 5J17
from IO_3^-, IO_4^-, Te^{IV} and Te^{VI}, by t.l.c., 6B187
from IO_3^-, TeO_3^{2-} and TeO_4^{2-}, liquid chrom., 6B170
from other halides, gel chrom., 1B130
Iodine, detmn., coulom., 1B127
spectroph., 1B128
turbidim., 2B126
volum., amplification method for, 6B186
in biol. fluids, X-ray emission spectrom., 6D7
in biol. materials, by n.a.a., 6D14
in milk, potentiom., with ion-sensitive electrode, or X-ray emission spectrom., 6F17
in modified rosin, volum., 6C93
in org. compounds, see under *Organic elementary analysis*
in plants, semi-automated spectroph., 1G2
in selenium, potentiom., with ion-sensitive electrode, 3B122
in soil, semi-automated spectroph., 1G2
in stack gases, potentiom., with I^--sensitive electrode, 2H14
in thyroid tablets, by O combustion - spectroph., 4E25
in urine, by n.a.a., 4D6
in water, by n.a.a., 2H16
of different chemical forms of, in water, potentiom., with I^--sensitive electrode, 5H32
of ^{125}I in thyroid tissue, 1A1*C*
of ^{129}I in biol. materials, by n.a.a., 3D24
of ^{131}I in milk, 1A1*C*
comparison of methods for, 1A1*C*
in molybdenum-99, γ-spectrom., 6B181
of total, in mixtures containing IO_3^- and I^-, spectroph., 1B129

Iodine—*continued*
n.m.r. study of systems containing butylamine and, 2A1*C*
sepn. from other elements, by g.s.c., 3B83
Iodine, organic compounds of, decomposition procedure for, 1C2
Iodochlorhydroxyquin, see *Clioquinol*
Ion exchange, materials for, *N*-aroylphenylhydroxylamine deriv. as, 2J16
hydroxamised-cellulose powder as, 4J14
resins as, *N*-acylphenylhydroxylamine deriv. of Zeokarb 226, 5J14
adsorption and partition on, 2A1*C*
characterisation, by pyrolysis - g.c., 3J17
detmn. of capacity and degree of cross-linking of, by pyrolysis - g.l.c. and i.r. spectroph., 6J11
detmn. of degree of cross-linking and nature of anion in, by pyrolysis - g.c., 5J15
effects of α- and γ-radiolysis on properties of, 3J18
tantalum arsenate as, 4J13
Ion micro-probe analysis, 1J66*B*
high-mass-resolution, of complex matrices, 3J74
quantitative analysis by, 2A1*C*, 2J111
review, 4J41
Ion microscopy, review, 5J82
Ionoluminescence analysis, use of synchronous detection for identn. of characteristic lines in, 3J78
Ipecacuanha, detmn. of alkaloids in tincture of, volum., 2E7
identn., by TAS technique, 2E8
Iphosphamide, detmn. in urine, in presence of cyclophosphamide and its other metabolites, by t.l.c. - spectroph., 3D46
Iproclozide, detmn. in urine, by g.l.c., 2D37
Irgasan DP 300, see *Phenol, 5-chloro-2-(2,4-dichlorophenoxy)-*
Iridium, detmn., amperom., 6B226
by n.a.a., 4B167
spectrogr., 1B166
spectroph., 1B173
in copper, by n.a.a., 5B52
in Cu - Ni ores, by n.a.a., 3B42
in industrial materials, by X-ray fluorescence analysis, 4B17
in iron meteorites, by n.a.a., 2J155
in minerals, ores or rocks, reference standard for, 5B209
in presence of Os and Pd, spectroph., 5B214
of other elements, by a.a.s., 4B160
sepn. from other elements, by g.s.c., 3B83
by solvent extraction, 5B210
from Rh, ion-exchange chrom., 4B162
solvent extraction of, with diantipyrinylmethane or tributyl phosphate in dichloroethane, 6B227
with esters of dithiocarbamic acids, 4B2
with heptan-4-one oxime, 2B154
sorption of, on sulphides from acid soln., 4B3
Iridium, reagents for, dithiobenzoic acid, 5B214
1-hydroxy-2-nitroso-3*H*-naphtho[2,1-*b*]pyran-3-one, 1B173
Iron, analysis, applications of a.a.s. in, 3B6
of inclusions in cast, by electrolysis - spectrogr., 5B191
concn., by co-pptn. on $MnO(OH)_2$, 4B15
liquid chrom., 2B14
detection of Fe^{II}, by colour reaction applied to single ion-exchange-resin grain, 1B4
of Fe^{II} or Fe^{III}, by t.l.c., 2B23
of Fe^{III}, micro-crystallogr., 3A5

Iron —*continued*
detection and detmn. in aluminium alloys, flam
emission spectrom., 3B63
detmn., by a.a.s., 2J86
automated, 2J85
interferences in, 5B181, 5B182, 6B193
with use of micro-probe - flame - adapte
atomiser, 3B7
with use of micro-sampling cup system
1B15
by kinetic method, 5B183
in air-borne dust, by a.a.s., 2H7
by g.l.c. of trifluoroacetylacetonate, 4H12
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 3H5, 3H6
in aluminium, by a.a.s., 1B56
concn. methods for, 4B46
in Al - Cu alloys, polarogr., 2B135
in AMS alloy, complexom., 1B18
in aq. soln., X-ray spectrogr., without use o
standards, 4J40
in beer, by a.a.s., 3F32
colorim., 4A1*C*
in beryllium or beryllium alloys, polarogr.
6B57
in biol. materials, by a.a.s., 3D8
by n.a.a., 4D5
in blood, by a.a.s., 4D14
in blood plasma or blood serum, automate
colorim., effect of desferrioxamine in, 3D25
in blood serum, correction for turbidity in, 1D
spectroph., 5D13, 5D14
in boric acid, by electrolysis - spectrogr., 5B85
in boron, X-ray spectrom., 4B42
in boron carbide, X-ray spectrom., 4B42
in boron nitride, spectrogr., 5B86
in cadmium sulphate, spectrogr., 5B78
in carbon, X-ray spectrom., 4B42
in cement slurries, 6B238
in copper alloys, X-ray emission spectrom., 6B3
in Cu - Fe - S systems, X-ray spectrom., 2B20
in copper ores, by n.a.a., 5B43
in feldspar, emission spectrom., with ion-bean
excitation, 4J44
in ferrites, spectroph., 6B206
in fertilisers, by a.a.s., extraction methods fo
4G6
in fish tissues, by a.a.s., 5F6
in gold, spectroph., 4B31
in hair, by a.a.s., 6D4
in hexaferrites, X-ray spectrogr., 2B138
in hornblende, X-ray emission spectrom., 3J57
in iron pyrites, potentiom., 4B141
in lead silicate glasses, by a.a.s., 6B234
in liver tissue, X-ray emission spectrom., 3D7
in magnesite, complexom., 1B138
spectrogr., 5B63
in magnetic materials, automated potentiom
2B137
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in minerals, ores or rocks, by n.a.a., 6B202
polarogr., 2B135
X-ray emission spectrom., 5B66, 6B208
in mussels, by m.s., 4F1
in petroleum or petroleum products, by a.a.s.
6C65
by a.f.s., 5B5
in plant Kjeldahl digests, by automated a.a.s
5G16
in plants, by a.a.s., 6J54
comparison of acids in wet digestio
methods for, 4D3

, determination in plants—*continued*
by n.a.a., 5G1
direct-reading emission spectrom., 2D5
spectrogr., 5D1
spectroph., 4G3
standards for, 2D4
X-ray emission spectrom., 3D7
in plutonium, by a.a.s., 2B67
in power-station effluents in presence of complexing agents, by a.a.s., 4H41
in presence of Cr and Ni, X-ray spectrom., correction for inter-element effects in, 4B143
of Co and Ni, spectroph., 4B140
of Cu, spectroph., 5B51
of Cu and Ni, by ring-oven t.l.c. - spectroph., 4J15
of Ti, complexom., 5B125
in sediments, by a.a.s., 6H26
by n.a.a., 2H17
in situ X-ray emission spectrom., 6H25
in selenium, by a.a.s., 3B122
in silica, spectroph., 6B117
in silicates, potentiom., 4B141
with electron micro-probe, 4B66
X-ray emission spectrom., 4B67
in slag, X-ray emission spectrom., 6B208
in soil, by a.a.s., comparison of extractants for, 3G6
spectroph., 4G3
in sphalerite, by laser sampling - emission spectrom., 5B75
in steel, by n.a.a., 6B202
with ion micro-probe, 2J111
in steel-corrosion products, X-ray spectrogr., 2B139
in thorium ores, spectroph., 2B134
in tin, by n.a.a., 5B124
spectrogr., 6B131
in tungsten or tungsten compounds, comparison of methods for, 4B125
in uranium, by a.a.s., 2B67
in uranium oxides, by a.a.s., 5B108
in water, 6H29
by a.a.s., 2H18
automated, 6H40
by co-pptn. on $Fe(OH)_3$ - X-ray emission spectrom., 6H31
by n.a.a., 2H16, 6B20
collection on chelating-agent-loaded resin for, 5H18
spectrogr., 5H19
X-ray fluorescence spectrom., concn. methods for, 2H19
in wine, X-ray emission spectrom., 3D7
in zirconium, by electrolysis - a.a.s., 2B88
of alloying and impurity elements in, by a.e.s., 2A1*C*
of Al in, by n.a.a., 5B192
of As in, spectroph., comparison of methods for, 1B152
of C in, by γ-activation, 6B216
by high-temp. oxidation, 5B113
of C, Mn, P, Si and S in cast, emission spectrom., 4B145
of Ce in cast, amperom., 1B148
of Ir in meteoritic, by n.a.a., 2J155
of ^{59}Fe in plants, by Cerenkov counting, 3D26
of Fe^{II}, amperom., 1B139
by chemiluminescence method, 6B194
by kinetic - spectroph. method, 2B131
cerim., indicator for, 4A13
spectroph., 1B13, 2A14, 2B132, 3B143, 4B139, 5B189, 6B197

Iron, determination of Fe^{II}—*continued*
vanadim., indicator for, 4A14
volum., redox indicators for, 1A5, 2A18
in iron(II) oxalate, volum., 4E4
in pharmaceutical preparations, spectroph., 5E5
in presence of Sb, volum., indicators for, 5B144
in silicates, volum., 4B71
in water, colorim. or spectroph., with use of reagent-impregnated PVC film, 2H40
spectroph., 2H41
suppression of Fe^{III} interference in, 3H33
of Fe^{III}, by ion exchange - X-ray photoelectron spectrom., 5B15
by kinetic - spectroph. method, 5B184
complexom., indicators for, 1B135, 5B179, 5B180
photom., 1B136, 5B185
polarogr., flow-through cell with porous electrodes for, 2B133
potentiom., 4B138, 5B17, 5B23
spectroph., 1B13, 1B137, 5B186, 5B187, 5B188, 6B195, 6B196
in alkali-metal chlorides, by a.a.s., 5B190
in oxidation products of phosphorus, gravim. or photom., 5B137
in presence of other metals, spectroph., 2B21
in silicates, mercurim., 4B72
in water, spectroph., 2H41
of Mn in pig-, X-ray emission spectrom., 5B218
of N in, polarogr., 6B203
of oxidised, in potassium hydroxide, spectroph., 6B26
of ^{35}S and total S in pig-, with use of single proportional counter, 4B107
of Ti in, by a.a.s., 4B148
extraction of Fe^{3+} from sea-water, by ion exchange, 4J14
paper-chrom. study of, in butanol - HCl media, 6B30
sepn. from Al, In or U, by solvent extraction, 1B7
from Al and Ti, or from Co and Cu, by solvent extraction, 1B136
from Bi, paper electroph., 3B5
from Cu, Ni, Pd and Zn, ion-exchange chrom., 2J18
from Cu, Ni and Zn, ion-exchange chrom., 1B17
from highly saline matrices, by selective pptn., 6B12
from Pd, by solvent extraction, 6B223
from Pt, electroph., 1B167
from sea-water, by interfacial co-pptn. with $Mg(OH)_2$, 6H50
from Th and U, paper chrom., 6B1
from V, by ion exchange, 2J16
of Fe^{II} from Cu and V, by ion exchange, 3B4
from Fe^{III}, by ion exchange, 2J16
of Fe^{III} from Al, Ca, Cu, Pb and Zn, by t.l.c., 2B136
from Ba, Ca, Mg and Sr, calculation of amount of base required for, 3B144
from Bi, Pb, Mn and Zn, by ion exchange, 1B2
from Ca and Mg, ion-exchange chrom., 6B63
from Co, Cu and Ni, by t.l.c., 1B19
from Hg, by solvent extraction, 6B67
from Ni, ion-exchange chrom., 2B5
from Pt-group metals, by solvent extraction, 5B210
from Ti, by t.l.c., 3B95
solvent extraction of, with benzoic acid - butylamine (or pyridine), 6B9
with esters of dithiocarbamic acids, 4B2

Iron, solvent extraction of—*continued*
with org. bases from SCN^- soln., 4B97
of Fe^{III}, as 1-(2-pyridylazo)-2-naphthol chelate, with molten naphthalene, 6B198
with aliphatic amines, 2B21
with β-diketones, 1B7
with *NN*-disubstituted amides, 6B17
with dithizone, 5B190
with 1-(2-pyridylazo)-2-naphthol - ReO_4^-, 4B13
surface analysis, review, 6B199
Iron, reagents for, acetylacetone, 6B206
aniline - catechol, 5B185
2,2′-bipyridyl - nitroprusside, 5B189
4-(2-bromo-4,5-dihydroxyphenylazo)benzene-sulphonic acid Na salt - cetylpyridinium chloride, 5B188
chlorpromazine, 2A14
diantipyrinylmethane, 1B136
5-dimethylamino-2-nitrosophenol, 4B139
4,7-diphenyl-1,10-phenanthroline, 2H40, 4B31, 6B117
di-2-pyridyl ketoxime, 6B26
Eriochrome cyanine R - tridodecylethylammonium bromide, 5B186
$Fe(CN)_6^{4-}$, 2B134
ferrozine, 4A3*C*, 5D13
furfuryliminodiacetic acid, 6B196
haematoxylin, 1B137
8-hydroxy-7-nitrosoquinoline-5-sulphonic acid Na salt, 5E5
lucigenin, 6B194
4-methoxy-*N*-*m*-tolylbenzohydroxamic acid, 1B13
2-[5-(1-methyl-2-piperidyl)-2-pyridylazo]-*p*-cresol, 2B132
nalidixic acid, 5B187
nitroprusside - 1,10-phenanthroline, 5B189
1,10-phenanthroline, 2H41, 3H33, 4G3
poly-(8-hydroxy-5-vinylquinoline), 6B12
pyrazine-2,3-dicarboxylic acid, 3B143
1-(2-pyridylazo)-2-naphthol, 4B140
4-(2-pyridylazo)resorcinol, 5D14
resacetophenone oxime, 6B195
sulphosalicylic acid, 5B137
1,2,3,4-tetrahydro-6-hydroxy-5-nitrosopyrimidine-2,5-dione, 6B197
SCN^-, 2B134, 5B51
tiron, 2B21
2,4,6-tris-(2-pyridyl)-1,3,5-triazine, 3D25
Iron alloys, see also *Steel*
analysis, effect of sample composition on spectrochemical methods for, 6B201
sample preparation for, 4B142
of AMS, scheme for, 1B18
detmn. of Sb in, coulom., 1B86
of Mn and P in, volum., of Si in, gravim. and of Ti in, photom., 2B141
of Sn in, photom., 1B87
of Ti in, complexom., 5B125
—, **Fe - Al,** phase analysis, and electrochem. dissolution of, 5B19
—, **Fe - B - C,** detmn. of B, Mn and Si in, spectrogr., 6B205
—, **Fe - Cr,** detmn. of C in, by high-temp. oxidation, 5B113
—, **Fe - Cr - Ni,** analysis, with electron micro-probe, 6J37
—, **Fe - Co,** detmn. of Co in, spectroph., 5B202
—, **Fe - Mo,** detmn. of Mo in, spectroph., 3B130, 3B156, 4B117, 5B166
sepn. of Cu from, by solvent extraction, 6B29
—, **Fe - Ni,** analysis, X-ray emission spectrom., with use of proton excitation, 6J41
—, **Fe - P,** detmn. of Si in, spectroph., 5B193
Iron alloys—*continued*
—, **Fe - Si,** detmn. of Al, Ca, Mn and Ti in, by a.a.s., 4B146
—, **Fe - W,** detmn. of Si in, amperom., 1B149
Iron(III) chloride, detmn., potentiom., 2B7
in aq. soln. containing other chlorides, by capillary-tube sepn. in electric field, 6B3
Iron complexes, of Fe^{II} with mono- and di-hydr azones of benzil and 2,2′-pyridil, 5A10
with picolinaldehyde thiosemicarbazone, 5B16
of Fe^{III} with acetylacetone, gel-chrom. study of 3B22
with *N*-phenylbenzohydroxamic acid, voltamm study of, 6B14
with AMP, cyclic-voltamm. study of, 2A1*C*
Iron ores, detmn. of Ba and Fe in barite-containing X-ray spectrom., 5B66
of B, Cr, Fe, Mn and Ni in, by n.a.a., 6B202
of Ca, Fe and Si in, X-ray emission spectrom. 6B208
of Mn in concentrates of, complexom., 2B146
of metallic Cr and Ni in products of reduction of dissolution method for, 5B194
of H_2O in, by dynamic Karl Fischer method 3B146
Iron oxides, detmn. of Pb in cosmetic-grade, by a.a.s., 3C67
Iron pyrites, detmn. of Fe in, potentiom., 4B141
Iron salts, detmn. in aq. soln., by β-ray back scattering, 5B18
Iron(II) sulphate, detmn., potentiom., 2B7
Iron(II) sulphide, detmn. in steel, by electrolysis reduction - conductim., 1B157
Isobutene, sepn. from other alkenes, by g.l.c., 6C16
Isobutyl alcohol, detmn. in beer, by g.l.c. of head space vapours, 3F34
sepn., identn. and detmn. of impurities in, and identn. and detmn. in isopropyl alcohol, by g.l.c., 4C14
Isobutylamine, detmn. in presence of amino-acid and NH_3, spectroph., 2D85
Isobutyric acid methyl ester, detmn. in methy methacrylate, by g.l.c., 5C58
Isobutyronitrile, azobis(-, detmn. in industria wastes, polarogr., 6H53
Isochavicine, identn. and detmn. in pepper o pepper extracts, by h.p.l.c., 3E16
Isocitrate dehydrogenase, see under *Enzymes specific*
Isocitric acid, detmn. in black- or red-curran products, enzymic, removal of interfering sub stances in, 4F20
Isocyanates, organic, control in synthesis of poly mers containing, 6C88
detection and detmn. of bound, in polyamide German official method for, 4F11
detmn. in polyurethans, by pyrolysis - g.l.c. 6C87
Isodiospyrin, t.l.c. study of, 6C53
Isoelectric focusing, characterisation of syntheti carrier ampholytes for, 2J21
detmn. of ^2H_2O density gradients for, with use o precision pH meter, 2J23
fractionation of carrier ampholytes for, 2J22
micro-technique for density-gradient, 3J19
report of symposium on, 6A2, 6J32
with use of buffer electrode soln., 3J20
Isohomovanillic acid, see *Acetic acid, 3-hydroxy-4 methoxyphenyl-*
Isoleucine, sepn. of enantiomers of, by h.p.l.c. of *N*-(+)-camphor-10-sulphonyl deriv. of 4 nitrobenzyl esters, 2D100
Isoliquiritin, detmn. in liquorice root, by t.l.c. spectroph., 5E19

oniazid, detmn., spectroph., 4E40
with its metabolites, polarogr., 3D44
in blood serum, fluorim., 2D43
onicotinic acid, detmn. in presence of isoniazid and its other metabolites, polarogr., 3D44
ophthalic acid, detmn. of methyl and dimethyl isophthalates in esterification products of, i.r. spectroph., 1C39
identn., by m.s. or plasma chrom., 2C42
esters, detmn. of methyl and dimethyl, in esterification products of isophthalic acid, i.r. spectroph., 1C39
ophthalic acid, 4-hydroxy-, detmn. in industrial wastes, by g.l.c. of methyl ester, 6H54
opiperine, identn. and detmn. in pepper or pepper extracts, by h.p.l.c., 3E16
opropamide, detmn., by oxidation - g.l.c., 4E6
h.p.l.c. study of, 4E36
opropyl alcohol, see *Propan-2-ol*
oquinoline, paper-chrom. study of, in formamide - formic acid media, 6C59
, tetrahydro-6,7-dihydroxy-, identn. as product of reaction of dopamine and methyltetrahydrofolic acid, by radio - g.l.c., 6D57
oquinoline derivatives, u.v.-spectroph. study of, 4E8
osorbide dinitrate, detmn. in pharmaceutical preparations, automated polarogr., 5E46
otachophoresis, analysis of tissue metabolites by, 5D88
current supply and detector system for, 2J24
electrolyte counter-flow system for, 6J13
report of symposium on, 6A2, 6J32
othiocyanates, organic, contents of rapeseed and rapeseed oil of, 2G13
detection and detmn. in rapeseed oil, by g.l.c. - t.l.c., 2F8
detmn., amperom., 5C21
othiocyanato-groups, detmn. in polyurethans, potentiom., 1C75
aconic anhydride, detmn., volum., indicator for use in morpholine method for, 6C26

J

am, detmn. of benzoic and sorbic acids in, u.v. spectroph., 3F19
aglone, 7-methyl-, t.l.c. study of, 6C53
avenile hormones, detmn., by g.l.c. or h.p.l.c., review, 3G49

K

aempferol 3-β-glucoside, detmn. in *Euphorbia* spp., by t.l.c. - spectroph., 1E12
anamycin, detmn. in urine, fluorim., 3D33
erosine, comparison of samples of, by g.l.c., 4C52
esterite, detmn. in tin ores, with stannite, volum., 1B88
etamine, detmn. in urine, with its metabolites, by h.p.l.c. of 4-nitrobenzamide deriv., 6D27
etone, ethyl methyl, identn. and detmn. in isopropyl alcohol, by g.l.c., 4C14
etones, detection, spot test for, 6C24
detmn., conductim., 5C4
g.c. study of, 3C14
sepn., by g.c., 3J34
derivatisation for, review, 5J27
, aromatic, detmn. of hydroxy-, bromim., 2C37
, β-di-, detmn. of enol form of, iodim., 6C25
, polychloroalicyclic, formation of chlorophenols during g.l.c. and g.l.c. - m.s. of, 5C11
Ketoprofen, detmn., by g.l.c. of methyl or trimethylsilyl ester, potentiom. or u.v. spectroph., and sepn. of enantiomers of, as (+)-1-phenylethylamides, by g.l.c. or liquid chrom., 2E37
Kidney tissue, detmn. of Cd in, by a.a.s., 6D10
of Pb in, X-ray emission spectrom., 3D7
of reduced glutathione in, enzymic - spectroph., 5D73
sepn. of lipids of, liquid chrom., spot-test method for detection in, 4D41
Krebs-cycle acids, see *Carboxylic acids, citric-acid-cycle*
Krypton, sepn. from Ar and He or from Ar, H, O and Xe, by g.c., 3B84
Krypton compounds, preparation, properties and uses of radioactive, 3A3

L

Laboratory apparatus, see also under headings such as *Dissolution*; *Distillation*; *Pumps*; etc.
automatic concn. monitor, 4J2
automatic digital microwave hygrometer, 2J7
bakeable glass isolation valve for ultra-high-vacuum systems, 2J4
break-bulb technique for sample introduction, 5J3
cleaning of polyethylene, for use in trace analysis, 6J1
device for preparation of standard mixtures of condensible vapours, 1J2
electrical lead-in for glass, 2J3
'funnels' for simult. addition of charcoal suspension to several samples in saturation analysis, 6D1
pipettes, adjustable automatic, 2J6
automatic systems, 3J4*P*, 3J5*P*
self-filling, plain and centrifuging, 6J2
sample-tube device, 3J2*P*
system for continuous-flow analysis, 3J6
system for supply of gas mixtures for work with dynamic chamber, 1J1
test-tube-washing apparatus, 5J1
tumbling device for fragile solid - liquid systems, 5J2
ultrasonic cleaning of sieves, 4J1
Lacquer, analysis of head-space vapours of, by g.l.c., 4C90
detmn. of phthalate esters in, by h.p.l.c., 2C83
Lactase, see *Enzymes, specific*, β-galactosidase
Lactate, detmn., amperom., enzyme electrode for, 5D45
enzymic - spectroph., 3D1
in milk, automated enzymic - photom., 5F30
of specific radioactivity of ^{14}C-labelled, in blood plasma, by reverse isotope dilution, 3D65
Lactate dehydrogenase, see under *Enzymes, specific*
Lactic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
in cream, spectroph., 5F31
in sugar products, enzymic, 6F7
sepn. from citric and malic acids and their salts, by t.l.c., 3E47
— **salts,** sepn. from lactic acid and from citric and malic acids and their salts, by t.l.c., 3E47
— —, **calcium,** identn. in illicit tablets, i.r. spectroph., 4E7
Lactic acid, 4-hydroxyphenyl-, identn. and detmn. in amniotic fluid, by g.l.c. and g.l.c. - m.s. of pentafluoropropionyl deriv. of methyl ester, 6D43
Lactones, detection of unstable, by t.l.c., with use of iron(III) hydroxamate test, 3D58
in Cheddar cheese, by g.l.c., 6F20

Lactones, detection—*continued*
of β-, in air, sorbents for, 1H14
identn. and detmn. in ripening blue cheese, by g.l.c., 5F32
sepn., identn. and detmn. in beer, by g.l.c. - m.s., 3F36
Lactoperoxidase, see under *Enzymes, specific*
Lactose, detmn., automated continuous-flow differential potentiom., 2F23
enzymic - spectroph., with use of immobilised enzymes, 3D1
in presence of other carbohydrates, by t.l.c. - densitom., 3C13
of [1-^{14}C]-, in blood plasma, milk or urine, enzymic - scintillation counting, 4D35
identn. in illicit tablets, i.r. spectroph., 4E7
in pharmaceutical preparations, by t.l.c., 1E50
Lamps, see *Light sources*
Lanthanum, detmn., spectrogr., 4B55
effect of NaCl carrier in, 5B94
in air-borne dust, by n.a.a., 2H5
emission spectrom., 4H4
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in presence of Eu and Yb, liquid chrom. - flame emission spectroph., 4B56
of Sc or Th, amperom., 6B82
in rare-earth concentrates, by n.a.a., 6B85
in steel, emission spectrom., 1B144
spectroph., 3B152
X-ray emission spectrom., 3B151
in tin, by n.a.a., 5B124
in water, by n.a.a., 2H16
spectrogr., 1H24
of impurities in, spectrogr., 1B65
sepn. from Mn, by ion exchange, 5B20
from other lanthanoids and Sc, by selective sorption, 3B73
from Sr, ion-exchange chrom., 2B5
Lanthanum, reagents for, arsenazo III, 3B152
Se analogues of azolidines, 5B2
Lanthanum complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Lanthanum oxide, detmn. of impurities in, spectrogr., 1B65
of Sc in mixtures with Lu and Y oxides of, fluorim., 6B83
of Tb in mixtures with Gd and Y oxides of, fluorim., 6B89
Lanthionamine, sepn. from other amines and thiodiamines, automated ion-exchange chrom., 1D61
Lasalocid, detmn. in blood, fluorim., 5D17
Laser micro-probe analysis, applications of, in clinical analysis, 5A2*C*
of org. materials, 2J112
Lasers, analytical applications of tunable, reviews, 2J81, 6J33
current-regulated, high-voltage power supply for continuous-wave, 2J47
long-life sealed CO, 4J34
repetitively pulsed double-discharge transversely excited atmospheric-pressure CO_2, 4J33
Lauric acid pentachlorophenyl ester, detection in wood, by t.l.c., 3C70
Lead, comparison of samples of bullet, by n.a.a., 2A10
concn., liquid chrom., 2B14
detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
of excessive exposure to, by assay of erythrocyte porphobilinogen synthase activity, 5D10
Lead—*continued*
detection and detmn., by t.l.c., 3B92
in solid samples, by a.a.s., 1C8
detmn., amperom., 4B14
anodic-stripping voltamm., at amalgamated copper rotating-disc electrode, 5B21
deriv. pulse, 2J131
by a.a.s., 2J86
automated, 2J85
electrolytic pre-concn. method for, 6B8
extraction method for, 3B11
with atomisation on tantalum carbide, 6B113
with use of micro-probe - flame - adapter atomiser, 3B7
with use of ultrasonic nebulisation, 3B13
by ion exchange - X-ray photo-electron spectrom., 5B15
by thermom. titration, 6B5
cathodic-stripping coulom., 2B84
complexom., comparison of titrants for, 4B10
indicators for, 3B14, 6B4
controlled-potential coulom., 2J131
coulom., 6C30
iodim., indirect, 2B11
photo-electron spectrom., 3B94
potentiom., 4B8, 4B11, 5B14
reflectance spectroph., 1B90
spectrogr., 6B16
spectroph., 3B14, 3B93
stripping chronopotentiom., 5B11
X-ray emission spectrom., diluent effects in, 1B14
in air, by a.a.s., 3H9
in molecular and particulate forms, by a.a.s., 3H8, 4H10
in air-borne dust, by a.a.s., 2H7, 5H5
emission spectrom., 4H4
spectrogr., 1H3, 3H5, 3H6
X-ray emission spectrom., 4H3
in aluminium, by a.a.s., 1B56
concn. methods for, 4B46
in $BaSO_4$ - $PbSO_4$ mixtures, gravim., 4B172
in beryllium or beryllium alloys, polarogr., 6B57
in biol. fluids, inter-comparison programme on, 5A3*C*
in biol. materials, by a.a.s., 3D8
in biol. tissues, 2A1*C*
in bismuth salts, fluorim., 5B74
in blood, by a.a.s., 1D7, 2A7*C*, 4D4, 4D14; 5A3*C*
effect of sample preparation in, 2D19
sampling procedures for, 1D13
in bone tissue, 5A3*C*
in boric acid, by electrolysis - spectrogr., 5B85
in boron carbide, X-ray spectrom., 4B42
in boron nitride, spectrogr., 5B86
in brass, by a.a.s., 3B6
in cadmium, spectroph., 1B48
in cadmium salts, fluorim., 5B74
in cadmium sulphate, spectrogr., 5B78
in cadmium sulphide, anodic-stripping voltamm., 4B36
in carbonates, by a.a.s., 4B77
in drugs, by a.a.s., 4E2
in estuarine water, by ion exchange - a.a.s., 4H18
in evaporated milk, by a.a.s., effect of time on results in, 5F7
in filter-paper, by a.a.s., 4D4
in fish tissues, by a.a.s., 5F6
in foods, anodic-stripping voltamm., 2F1
inverse voltamm., 3F2

ad, determination—*continued*
in germanium or germanium alloys, stripping voltamm., 6B126
in gold, spectroph., 4B31
in hair, by a.a.s., 6D4
in industrial materials, by X-ray fluorescence analysis, 4B17
in iron oxide, by a.a.s., 3C67
in kidney tissue, X-ray emission spectrom., 3D7
in lead silicate glasses, thermom., 6B235
in lead - zirconium titanate ceramics, electrogravim., 6B237
in liver tissue, by a.a.s., 6D3
X-ray emission spectrom., 3D7
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in minerals, ores or rocks, by a.a.s., with direct introduction of powdered sample into flame, 5B217
polarogr., precision and accuracy of method for, 5B71
spectrogr., 6B13
in mussels, by m.s., 4F1
in nickel alloys, ion-exchange chrom. - a.a.s., 6B218
in nickel electrolytes, by a.a.s., 1B165
in organotin compounds, inverse voltamm., 4F12
in paints, by a.a.s., 1C77
B.S.I. method for, 2C84
in petroleum or petroleum products, by a.a.s., 2C52, 2C53
possible olefin interference in, 4C54
complexom., 4C53
in plants, by a.a.s., 6J54
comparison of acids in wet digestion methods for, 4D3
X-ray emission spectrom., 3D7
in polyethylene, by a.a.s., 4D4
in presence of Sb, Bi and Te, by luminescence method, 2B18
of Bi and Sn, oscillopolarogr., 2B83
of Cu, In or Tl, polarogr., 6B14
of other elements, by t.l.c. - colorim., 2B15
of Te, by luminescence method, 2B118
of U, polarogr., 3B78
in saccharides or sorbitol, stripping voltamm., 6F4
in sea-water, by a.a.s., 4D4
in sediments, by a.a.s., 6H26
in situ X-ray emission spectrom., 6H25
polarogr., 5H24
in sewage or sewage effluent, anodic-stripping voltamm., 1H29
in silicates, by a.a.s., 2B78
in skin, spectrogr., 4D2
in soil, by a.a.s., comparison of extractants for, 3G6
in steel, by a.a.s., 2B144
emission spectrom., 1B144
X-ray spectrom., use of briquetted samples for, 1B151
in titanium(IV) oxide, by a.a.s., 1B94
in triuranium octaoxide or 'yellow cake', by a.a.s. or spectroph., 6B100
in urine, by a.a.s., 4D4
X-ray emission spectrom., 1D5
in vanadium, spectrogr., 6B155
in water, 6H29
anodic-stripping voltamm., 1H29, 2A4*C*, 3H17
automated, 2H22
by a.a.s., 2H21, 5H21
automated, 1H33

Lead, determination in water—*continued*
by co-pptn. on $Fe(OH)_3$ - X-ray emission spectrom., 6H31
by electro-deposition - spectrogr., 2H20
by ion exchange - a.a.s., 1H28
ion-exchange chrom. - a.a.s., 5H20
polarogr., 5H24
potentiom., with ion-sensitive electrode, 6H30
spectrogr., 5H19
in wine, X-ray emission spectrom., 3D7
in zinc salts, fluorim., 5B74
in zinc sulphide, anodic-stripping voltamm., 4B36
of isotopes of, in lunar materials or minerals, by isotope dilution - m.s., 6B133
in ores, interferom., 1B91
of Pb^{II} in Pb^{IV} acetate soln., complexom. - potentiom., 4B75
of org., in air, by a.a.s., adsorption technique for, 4H14
of Ag in, spectroph., 3B45
paper-chrom. study of, in butanol - HCl media, 6B30
sepn. from Sb, Mo, Nb, Ta, Sn and W, ion-exchange chrom., 6B134
from Bi, Fe, Mn and Zn, by ion exchange, 1B2
from Bi and Zn, by t.l.c., 5B4
from Cd, Co, Cu, Mn and Zn, ion-exchange chrom., 1B17
from Cd, Co, Cu, Ni and Zn, ion-exchange chrom., 1J11
from highly saline matrices, by selective pptn., 6B12
from Fe, by t.l.c., 2B136
from Hg, ion-exchange chrom., 5J14
from Hg and Ag, or from Ni, by ion exchange, 5B20
from Hg or Ag, paper electroph., 3B5
from other elements, by g.s.c., 3B83
by t.l.c., 2B6
solvent extraction of, with *NN*-disubstituted amides, 6B17
with hexafluoroacetylacetone - dibutyl sulphoxide or tributyl phosphate, 2B47
spectroph. study of reaction with Na rhodizonate of, 4B76
—, **alkyl-,** detmn. in petrol, by g.l.c., 2C54
—, **tetraethyl-,** detmn. in air, by a.a.s., 1H19
—, **tetramethyl-,** detmn. in air, by a.a.s., 1H19
Lead, reagents for, 9,9′-bixanthene, 5B74
carminic acid, 1B90
dithizone, 2B15, 4B31, 6B100
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
poly-(8-hydroxy-5-vinylquinoline), 6B12
Lead alloys, detmn. of Sb, As and Sn in, X-ray emission spectrom., 6B135
of Cd in, spectroph., 2B49
Lead complexes, with 2,2′-dichlorodithizone, 5A9
with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
Lead ores, detmn. of Cu and Zn in concentrates of, complexom., 5B39
of Pb and Zn in, polarogr., precision and accuracy of method for, 5B71
of Pb isotopes in, interferom., 1B91
granulation and reduction of bulk samples of Zn - Pb sulphide, 4B37
Lead(II) oxide, identn. as principal component of street dust, with electron micro-probe, 2J66
Lead salts, detmn. in aq. soln., by β-ray back-scattering, 5B18
Lead silicate, detmn. of Pb in glasses of, thermom., 6B235
of trace metals in glasses of, by a.a.s., 6B234

Lead sulphate, detmn. of Pb in mixtures with $BaSO_4$ of, gravim., 4B172
Lead - zirconium titanate, methods for analysis of, 6B237
Leaves, see under *Plants*
Lecithins, see *Phosphatidylcholines*
Lemon oil, detmn. of citral and esters in, i.r. spectroph., 1C64
Leptazol, detmn. in blood plasma or urine, by g.l.c., 5D25
Lettuce, detmn. of carbaryl or carbofuran in, by g.l.c. of sulphonate deriv., 1G20
of dicloran, hexachlorobenzene and quintozene residues in, by g.l.c., 2G23
of paraquat in, by g.l.c., 6G6
Leucine, sepn. of enantiomers of, by h.p.l.c. of *N*-(+)-camphor-10-sulphonyl deriv. of 4-nitrobenzyl esters, 2D100
Leucine aminopeptidase, see under *Enzymes, specific*
Light sources, see also *Lasers*
automatic optimisation of pulsed hollow-cathode discharge tubes, 2A1*C*
high-power arc as absolute standard of spectral radiance in vacuum-u.v., 4J43
mechanism of excitation of atoms in electrodeless discharge, 2A1*C*
microwave electrodeless discharge, 2A1*C*
removal of O_3 from cooling air for arc, 2J48
spectra enhancement of near-u.v. xenon flash, 5J35
triggering system for flash, 4J35
Ligninsulphonate, detection in sea-water, fluorim., 4H34
Lignocaine, detmn. in pharmaceutical preparations, spectroph., 1E37
identn., by t.l.c., 3E4
Limestone, detmn. of Cd, Cu and Pb in, by a.a.s., 3B11
of elements in, by n.a.a., 3B51
of Ag in, spectroph., background correction for, 5B64
Limonin, detmn. in grapefruit juice, by h.p.l.c., 5F35
***Lindera* spp.,** fractionation of essential oils of, liquid chrom., 6C74
Linoleic acid, detmn. in blood serum, by g.l.c., 6D40
identn. and detmn. of aldehydes in enzymic-oxidation products of, by g.l.c., 4F36
Linseed oil, analysis of diacylglycerols in, by g.l.c. of trimethylsiiyl deriv., 4F35
Lipases, see under *Enzymes, specific*
Lipids, see also *Glycolipids; Phospholipids*
analysis, by h.p.l.c., review, 3D70
of avian preen-gland, by t.l.c. - liquid chrom. - g.l.c. - m.s., 3D72
of blood, blood-plasma or tissue, by t.l.c. - g.l.c. of esters, 1D49
of blood-plasma or blood-serum, by automated g.l.c., 3D73
analysis and detmn. of ether, in biol. materials, by t.l.c. and g.l.c., 5D52
detmn. in faeces, spectroph., 5D51
of acyl - acyl carrier proteins and acylCoA in, sepn. scheme for, 5D53
identn. and detmn. of carboxylic acids in, by g.l.c., preparation of methyl esters for, 3F49
liquid-chrom. studies of, review, 2D76
sepn., liquid chrom., spot-test method for detection in, 4D41
of soya-bean, by h.p.l.c., 5F65
Lipoamide dehydrogenase, see under *Enzymes, specific*
Lipoproteins, detmn. of apoproteins of low-density, in blood serum, by Lowry spectroph. method, 6D66
of cholesterol in fractions of, gel electroph. - fluorim., 4D44
sepn. of blood-serum, gel electroph., comparison of methods for, 2D129
Lipstick, see under *Cosmetics*
Liquiritin, detmn. in liquorice extract, by t.l.c. - spectroph., 5E19
Liquorice root, detmn. of glycyrrhizin in, by t.l.c. 2E13
comparison of methods for, 4E20
evaluation of extract of, in drugs, by t.l.c. - spectroph. detmn. of constituent aglycones, 5E19
Lithium, detmn., by a.a.s., 2J86
by a.e.s., with use of heated-graphite atomiser, 2B10
potentiom., 3B28
in biol. materials, by a.a.s., 3D8
in hair, by a.a.s., 6D4
in lithium-drifted cadmium arsenide crystals, anodic-stripping voltamm., 3B10
in minerals, ores or rocks, flame spectroph., 2B27
in petroleum or petroleum products, by a.a.s., 6C65
in plants, by a.a.s., 6J54
in presence of isocyanates, polarogr., 6C88
in refractory materials, flame spectrom., 1B78
in sediments, by a.a.s., 6H26
in steel, by electrolysis - flame photom., 2B140
of H in, by m.s., and of N in, colorim., 2B28
Lithium fluoride, detmn. of impurities in, by m.s., 3B29
Lithium tetrahydroborate, detmn., coulom., 6B23
Liver tissue, analysis of volatile constituents of, by g.l.c., 3D2
assay of δ-aminolaevulinate synthase in homogenates of, comparison of methods for, 1D94
of aryl 4-monooxygenase in, electrochem., 2D147
of cholesterol 7α-hydroxylase in microsomes of, by t.l.c. - g.l.c., 1D93
of epoxide hydratase in, liquid chrom., 3D132
detmn. of acaricides in, by g.l.c. of trifluoroacetyl deriv., 3G38
of acetate in, by g.l.c., as benzyl acetate, 3D64
of As in, by g.c. - emission spectrom., 3D19
of bilirubin in conjugated and unconjugated forms in, spectroph., 2D132
of Cd in, by a.a.s., 6D10
of Cu, Pb, Mn and Ag in, by a.a.s., with solid sampling, 6D3
of cytochrome P-450 in, by e.s.r., 2D125
of Fe, Pb and Zn in, X-ray emission spectrom., 3D7
of metals in, wet-ashing in microwave oven for, 3D5
of methadone in, by g.l.c., comparison of isolation procedures for, 4D22
of paraoxon and parathion in, by g.l.c. or enzymic, 2D54
of reduced glutathione in, enzymic - spectroph., 5D73
differentiation between fresh and thawed-frozen, electroph., 5F28
extraction of drugs and their metabolites from, with use of Amberlite XAD-2 resin, 1D18
of trimetazon metabolites from, 6D30
sepn. of 28S and 18S rRNA of, gel chrom., 2D135

orazepam, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
ubricating oils, analysis of glyceride-based, by h.p.l.c., 6C67
detmn. of Ba in, by a.a.s., 2C50
of Ba, O and P in additives for, by n.a.a., 3C55
of Cr, Cu, Fe, Mg and Ag in used jet-engine, by a.f.s., 5B5
of ethanediol and H_2O in used crankcase, by g.c., 3C54
of P and Zn in additives for, spectroph. and polarogr., 6C68
of S in sebacate-based, gravim. or spectroph., 2C63
of trace elements in, by a.a.s., 1C57
of Zn in, or in additives for, by a.a.s., 3C56
sepn. of base oils and additives in, continuous-elution liquid chrom., 6C66
ucerne, detmn. of Co in, by a.a.s., 6G3
of coumoestrol in dried, or in leaf protein concentrates of, paper chrom. - fluorim., 4G14
of F^- in, potentiom., with ion-sensitive electrode, 5G15
uminescence, see also *Chemiluminescence*
analytical applications of X-ray-excited optical, in solids and gases, 2A7*C*
unar materials, detmn. of Au in, by n.a.a., sepn. procedure for, 6B48
of Pb isotopes in, by isotope dilution - m.s., 6B133
ung tissue, analysis of volatile constituents of, by g.l.c., 3D2
analytical studies of, 1A1*C*
detmn. of Cd in, by a.a.s., 6D10
upulone, detmn. in hop extracts, by n.m.r., 5F51
utetium, detmn., spectrogr., effect of NaCl carrier in, 5B94
in alkaline-earth-metal fluorides, spectrogr., 6B59
in presence of La, spectroph., 1B67
in rare-earth concentrates, by n.a.a., 6B85
utetium, reagent for, 8-hydroxy-5,7-di-iodoquinoline - Rhodamine B, 1B67
utetium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
utetium oxide, detmn. of Sc in mixtures with La and Y oxides of, fluorim., 6B83
,6-Lutidine, 3-[2-(benzylmethylamino)ethoxycarbonyl]-1,4-dihydro-5-methoxycarbonyl-4-(3-nitrophenyl)-, hydrochloride, detmn. in blood plasma, by oxidation - g.l.c., 3D42
ye, detmn. of oils in, fluorim., 5H39
ymphocytes, assay of adenosine deaminase in, radiom., 2D161
ysergide, sepn. from ergot alkaloids and identn., by t.l.c., 1E6
ysine, detmn. in cereals, spectroph., 2G8
in feeding-stuffs, by g.l.c. of trimethylsilyl deriv., 6G5
of available, in cottonseed meals, ion-exchange chrom. - spectroph., 2G9
identn., colour reaction for, and sepn. from related compounds, ion-exchange chrom., 6D63
sepn. from blood hydrolysates, as 2-chloro-4-(4-hydroxyphenylazo)benzenesulphonate, 2D107
–, 4-selena-, identn., colour reaction for, and sepn. from related compounds, ion-exchange chrom., 6D63
–, 4-thia-, identn., colour reaction for, and sepn. from related compounds, ion-exchange chrom., 6D63
Lysine hydroxylase, see under *Enzymes, specific*
Lysozyme, see under *Enzymes, specific*

M

MBC, see *Carbamic acid, benzimidazol-2-yl-, methyl ester*
Mace, see Myristica fragrans
Mackerel, detmn. of oxidative rancidity in, comparison of methods for, 2F27
Magnesite, detmn. of Ca in, X-ray emission spectrom., 5B218
of Ca, Fe and Si in, spectrogr., 5B63
of Cr in, X-ray emission spectrom., 6B208
of H and N in, spectrogr., 5B134
of Fe in, complexom., 1B138
spectroph., 1B137
Magnesium, detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
spectroph., 1B39
detection and detmn. in aluminium alloys, flame emission spectrom., 3B63
detmn., by a.a.s., 3B49
by a.e.s., with use of heated-graphite atomiser, 2B10
by thermom. titration, 6B5
coulom., 6C30
gravim., 1B12
spectroph., 4B33, 5B61
concn. on active carbon for, 1B40
in air-borne dust, by a.a.s., 2H7
in alkali-metal or barium halides, by m.s., 3B29
in aluminium, by a.a.s., 1B56
concn. method for, 4B46
emission spectrom., 1J39
in AMS alloy, complexom., 1B18
in biol. materials, by a.a.s., 3D8
by n.a.a. - Cerenkov counting, 2D7
in blood, by a.a.s., 4D14
in blood serum, by a.a.s., 2D6
in boric acid, by electrolysis - spectrogr., 5B85
in boron nitride, spectrogr., 5B86
in brain tissue, by a.a.s., 6D6
in gold, fluorim., 4B31
in hair, by a.a.s., 6D4
in hornblende, X-ray emission spectrom., 3J57
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in metalloenzymes, emission spectrom., 2D143
in multi-electrolyte infusion fluids, complexom., 4E1
in petroleum or petroleum products, by a.a.s., 6C65
by a.f.s., 5B5
in plants, direct-reading emission spectrom., 2D5
spectrogr., 5D1
standards for, 2D4
in refractory materials, flame spectrom., 1B178
in sediments, by a.a.s., 6H26
in silicates, with electron micro-probe, 4B66
in sodium, by a.a.s., 5B31
in soil, by a.a.s., comparison of extractants for, 3G6
in steel, emission spectrom., 2B142
spectrogr., 1B146
in tin, spectrogr., 6B131
in urine, by n.a.a., 4D6

Magnesium, determination—*continued*
in water, 6H29
automated amperom., 6H33
by n.a.a., 2H16
in wheat, by n.a.a., 6G2
of Al in, spectroph., 5B88
of 'ultra-filtrable' and total, in blood serum, automated volum., 6D8
sepn. from Ba and Cs, paper chrom., 3B3
from other elements, ion-exchange chrom., 6B63
from Ti, by t.l.c., 3B95
from V, ion-exchange chrom., 3B115
Magnesium, reagents for, 2,7-bisazo-deriv. of chromotropic acid, 5B61
bis(salicylidene)ethylenediamine, 4B31
Eriochrome black T, 1B40
5-hydroxybenzo[*a*]phenazine, 1B39
Titan yellow, 4B33
8-(toluene-*p*-sulphonamido)quinoline, 1B12
Magnesium alloys, detmn. of Al in, spectroph., 5B88
of Be in, by a.a.s., 3B61
of Co in, spectroph., 5B204
of Fe in, photom., 1B136
of Zn in, spectroph., 3B50
method for dissolution of samples of, 1B1
Magnesium chloride, detmn., potentiom., 2B7
in aq. soln. containing other chlorides, by capillary-tube sepn. in electric field, 6B3
Magnesium fluoride, detmn. of rare-earth metals in, spectrogr., 6B59
Magnetic materials, detmn. of Ba, Fe and Zn in, automated potentiom., 2B137
Maize, detection of aflatoxins in, fluorescence reaction for, 5F14
of rubratoxin B in, by t.l.c., 5G23
detmn. of aflatoxin B_1 in roasted, by t.l.c., 2F21
of carbamate and urea herbicides in, by g.l.c. of methyl deriv., 5F45
of elements in, by n.a.a., 5G1
of F^- in, potentiom., with ion-sensitive electrode, 5G15
of Omite in, by g.l.c., 1G22
of resmethrin in, or in meal of, by g.l.c., 4G39
of tryptophan in protein of, spectroph., 5G5
identn. of inositol hexaphosphate in, 5G3
of starch of, in illicit tablets, i.r. spectroph., 4E7
Maize oil, see *Corn oil*
Malathion, detection and identn., by t.l.c., 4G35
detmn. in air-borne dust, by g.l.c., 6H23
in biol. tissues, radiom., and detmn. of O-analogue of, by t.l.c., 1G19
in formulations, iodim., and study of shelf-life of, 3G42
in vegetables, by g.l.c., avoidance of interference by S compounds in, 2G30
Maleic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
— **anhydride,** analysis of products of sulphonation of, potentiom., 6C34
detmn. in its copolymers with vinyl acetate, automated potentiom., standards of known composition for, 5C56
— **di-iso-octyl ester,** detmn., polarogr., 5C15
— **hydrazide,** detmn. in tobacco or vegetables, spectroph., collaborative study of, 5G37
Maleic acid, sulpho-, anhydride, detmn. in products of sulphonation of maleic anhydride, potentiom., 6C34
Malic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
Malic acid, determination—*continued*
in presence of citric, fumaric and succinic acids, paper chrom. - photom., 1D42
of HCl or HNO_3, potentiom., 3A8
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
sepn. from citric and lactic acids and their salts, by t.l.c., 3E47
from other citric-acid-cycle acids, liquid chrom., 1D41
— **salts,** sepn. from malic acid and from citric and lactic acids and their salts, by t.l.c., 3E47
Malonamide, 2-ethyl-2-phenyl-, preparation of ^{14}C- and ^{2}H-labelled, 1D20
Malonic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
—, **methyl-,** detmn. in muscle tissue, by g.l.c. of methyl ester, 2D67
in urine, comparison of automated and manual methods for, 2D56
Malononitrile derivatives, arylidene-, detmn., spectroph., 5C34
Malt, analysis, review, 6F27
detmn. of proteins in, comparison of methods for, 5F50
Malt wort, characterisation, by partition-chrom. analysis of constituent sugars, 5F47
detmn of α-amino-N in, automated spectroph., 5F49
of Cl^- in, potentiom., with ion-sensitive electrode, 3F31
of nucleic acid breakdown products in, by h.p.l.c., 1F15
of O dissolved in, potentiom., with O-selective electrode, 5F54
of total N in, automated spectroph., 5F48
Maltol, see *Pyran-4-one, 3-hydroxy-2-methyl-*
Maltose, detmn. in presence of other carbohydrates, by t.l.c. - densitom., 3C13
Malvidin, sepn. from peonidin and petunidin, by h.p.l.c., 5F59
Mandelic acid α-methylbenzylamine salt, sepn. of diastereoisomers of, by recrystallisation, 4C38
Mandelic acid, 4-hydroxy-3-methoxy-, detmn. in urine, by g.l.c., 6D44
identn. and detmn. in amniotic fluid, by g.l.c. and g.l.c. - m.s. of pentafluoropropionyl deriv. of methyl ester, 6D43
Maneb, amine content of commercial formulations of, 5G29
Manganese, detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
colour reaction for, 2B127
detection and detmn. in aluminium alloys, flame emission spectrom., 3B63
detmn., amperom., 5B177
by a.a.s., automated, 2J85
electrolytic pre-concn. method for, 6B8
with use of micro-sampling cup system, 1B15
with use of ultrasonic nebulisation, 3B13
by a.f.s., 2J83
by e.s.r., 2B19
by kinetic - spectroph., methods, 1B131, 6B188
by n.a.a., 2J150
by thermom. titration, 6B5
by two-phase titration, 5B176
complexom., indicator for, 3B14
gravim., 5B175
potentiom., 4B11, 5B17
radiopolarogr., 1B132

anganese, determination—*continued*
spectrogr., 6B16
spectroph., 2B128, 4B134
X-ray emission spectrom., 1B119
pre-concn. method for, 3B15
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 3H5, 3H6
in alkaline-earth-metal compounds, by luminescence method, 5B62
in aluminium, by a.a.s., 1B56
concn. methods for, 4B46
by n.a.a., 4B47
in AMS alloy, as $KMnO_4$ or potentiom., 1B18
in biol. materials, by a.a.s., 3D8
in blood, by a.a.s., 4D14
in blood or blood serum, by a.a.s., 3D9
in boric acid, by electrolysis - spectrogr., 5B85
in boron carbide, X-ray spectrom., 4B42
in cadmium, spectroph., 1B48
in carbon, X-ray spectrom., 4B42
in corundum, by n.a.a., 4B49
in ferrosilicon alloys, by a.a.s., 4B146
in fish tissues, by a.a.s., 5F6
in fruit, polarogr., 4F2
in hair, by a.a.s., 6D4
in hornblende, X-ray emission spectrom., 3J57
in ilmenite, by a.a.s., 1B95
in iron, emission spectrom., 4B145
X-ray emission spectrom., 5B218
in iron alloys, volum., 2B141
in Fe - B - C alloys, spectrogr., 6B205
in iron ore, by n.a.a., 6B202
in lead silicate glasses, by a.a.s., 6B234
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in liver tissue, by a.a.s., 6D3
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in metallurgical samples, complexom., 2B146
in minerals, ores or rocks, by a.a.s., with direct introduction of powdered sample into flame, 5B217
in mussels, by m.s., 4F1
in petroleum or petroleum products, by a.a.s., 3C42
in plants, by a.a.s., 6J54
comparison of acids in wet-digestion methods for, 4D3
direct-reading emission spectrom., 2D5
spectrogr., 5D1
standards for, 2D4
X-ray emission spectrom., 3D7
in sediments, by a.a.s., 6H26
by n.a.a. or spectrogr., 2H17
in situ X-ray emission spectrom., 6H25
in silicates, with electron micro-probe, 4B66
X-ray emission spectrom., 4B67
in soil, by a.a.s., comparison of extractants for, 3G6
in steel, by a.a.s., 3B148
by m.s., 4B144
by n.a.a., 6B202
comparison of methods for, 1B145
emission spectrom., 1B144, 2B142, 4B145
with ion micro-probe, 2J111
X-ray emission spectrom., 5B218
detection limits in, 5B195
in steel-corrosion products, X-ray spectrogr., 2B139
in tin, by n.a.a., 5B124
in titanium dioxide, by n.a.a., 5B128
in TiO_2-based pigments, by a.a.s., 1B95

Manganese, determination—*continued*
in uranium oxides, by a.a.s., 5B108
in urine, by n.a.a., 4D6
in vanadium, spectrogr., 6B155
in water, 6H29
by a.a.s., 1H35, 2H18, 5H21
automated, 6H40
by electro-deposition - spectrogr., 2H20
by n.a.a., 2H16
collection on chelating-agent-loaded resin for, 5H18
ion-exchange chrom - a.a.s., 5H20
spectrogr., 5H19
in wine, X-ray emission spectrom., 3D7
sepn. from Bi, Fe, Pb and Zn, by ion exchange, 1B2
from Cd, Co, Cu, Pb and Zn, ion-exchange chrom., 1B17
from highly saline matrices, by selective pptn., 6B12
from La, by ion exchange, 5B20
from Hg, by solvent extraction, 6B67
from Pt, electroph., 1B167
from Ti, by t.l.c., 3B95
solvent extraction of, with esters of dithiocarbamic acids, 4B2
with sulphoxides, 4B135
Manganese, reagents for, cacotheline, 2B127
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
3-ethyl-2-thiohydantoin, 4B134
N-phenylbenzohydroxamic acid, 5B175
poly-(8-hydroxy-5-vinylquinoline), 6B12
Se analogues of azolidines, 5B2
thiothenoyltrifluoroacetone, 2B128
Manganese alloys, analysis of AMS, scheme for, 1B18
—, **Mn - Al,** phase analysis, and electrochem. dissolution of, 5B19
—, **Mn - Fe,** analysis, sample preparation for, 4B142
Manganese(II) chloride, detmn., potentiom., 2B7
in aq. soln. containing other chlorides, by capillary-tube sepn. in electric field, 6B3
Manganese complexes, with aliphatic hydroxamic acids, 6A8
Manganese(II) sulphide, detmn. in steel, as S, 1B157
Mannitol, sepn. from other polyols, by t.l.c. or paper chrom., 3C11
Mannose, detmn. in presence of other carbohydrates, by t.l.c. - densitom., 3C13
sepn. from other carbohydrates, liquid chrom., 1D41
and identn., by g.l.c. - m.s. of trimethylsilylated butaneboronate deriv., 6C20
Maprotiline, detmn. in blood, blood plasma or urine, by g.l.c. of heptafluorobutyryl deriv., 6D24
Marble, detmn. of elements in, by n.a.a., 3B51
method for use in reconstruction of broken artefacts, 5A5*C*
of Fe in, spectroph., 1B137
of Ag in, spectroph., background correction for, 5B64
Maretin, see *Naphthalophos*
Margarine, detmn. of solid-fat content of, comparison of pulsed and wide-line n.m.r. and dilatometry for, 2F45
of vitamin A in, 6E15
Mass spectrometry, analysis of gaseous radiation-decomposition products from solids by, 6J64
of micro-particles by, 5J75
apparatus for, focusing errors of multiple-focusing time-of-flight, 5J73

Mass spectrometry, apparatus for—*continued*
for secondary-ion studies in ultra-high vacuum, 2J113
molecular-beam surface-ionisation detector in combination with quadrupole, 2J115
chemical-ionisation, 2A1*C*
chemical mass markers in, 6J65
pressure-measurement probe for use in source of Du Pont 21 490-β instrument, 5J74
compensation for external magnetic interference fields in, 3J76
computer programs for spectral classification in, 3J77
DADI (direct analysis of daughter ions) technique for, 5J77
device for detmn. of mass numbers in, 3J73*P*
digital output system for MS5 instrument, 5J81
field-desorption, analysis of inorg. salts by, 3B8
of onium salts, 2C4
review, 1J61
flat-faced quadrupole electrodes for, 2J116
focus - threshold monitor for mass-fragmentographic technique, 2J44
identn. of non-volatile org. compounds by, 4C1
imaging detector for, 5J78
ion sources for, hollow-cathode, 2J110
r.f. cavity, 3J75
Townsend discharge-tube as, 5J76
layer-by-layer analysis of solids by, with use of laser sampling, 5B8
method for rapid continuous transfer of liquid in, 1J59
methods of factor analysis of spectra of org. compounds, 2C3
peak matching in high-resolution, 2A1*C*
photon-blind, high-collection-efficiency detector for, 5J79
plasma-chrom. technique for, analytical characteristics of, 2A1*C*
identn. of positive reactant ions observed for N carrier gas in, 6J66
recent developments in ionisation processes in, review, 6J63
search system for use in, 2A1*C*
spark-source, improvement of precision and accuracy in, 5J72
solid-state isotope dilution in, 2J114
unit for control and automatic accumulation of repetitive scans, 1J60
spectral classification in, with use of adaptive learning networks, 5J80
spectral identn. in, by 'goodness-of-fit' calculation, 2J117
use of pattern-recognition techniques for generation of spectra in, 3A11
Maté, detmn. of caffeine in, gel chrom., 4F27
Matricaria chamomilla, see *Chamomile*
Meat, see also *Bacon*; *Beef*
characterisation of polycyclic hydrocarbons in, by g.l.c., 2F16
detection of antithyroid drug residues in, by t.l.c., 1F13
detmn. of Cd, Cu and Pb in, inverse voltamm., 3P2
of fat in, by solvent extraction - densitom., 5F24
choice of system for, 5F23
of fat and H_2O in, i.r. a.t.r. spectroph., 4F16
of heavy metals in, by a.a.s., 5F5
of Hg in, emission spectrom., 5B80
of NO_2^- in, filter-paper as source of error in, 4F17
of *N*-nitrosamines in, by g.c., 6F5
by g.l.c. - m.s., 2F15
Meat, determination of *N*-nitrosamines—*continued*
by steam-distillation - g.l.c. or t.l.c., 3F9
of Se in, fluorim., 5F9
of H_2O in, gravim., microwave-oven method for, 5F21
Meat products, detmn. of benzo[*a*]pyrene and other polycyclic hydrocarbons in, clean-up method for, 5F27
of ethanol in, enzymic - spectroph., 5F22
of fat in, by solvent extraction - densitom., 5F24
of fat and H_2O in, i.r. a.t.r. spectroph., 4F16
of NO_3^- and NO_2^- in, automated, 6F13
of *N*-nitrosamines in, by g.l.c. - m.s., 2F15
by steam-distillation - g.l.c. or t.l.c., 3F9
of soya-bean protein in meat - soya blends, gel electroph., 5F26
of urea in, with Merckognost test-stick, 5F25
methods for adjustment of fat content of, and detmn. of fat in, 1F10
Meclozine, identn., by t.l.c., 3E4
Meconic acid, detection and detmn., colour reaction for, 3E9
Mecoprop, detmn. in cereals or soil, in presence of 2,4-D and dicamba, by g.l.c. of methyl ester, 4G22
Medazepam, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
Melamine derivatives, (hydroxymethyl)-, sepn., by t.l.c., 4C84
Melengestrol acetate, detmn. in adipose tissue, by g.l.c., 5D33
Menaphthone, detmn., by TAS technique - spectroph., 5E2
differential pulse polarogr., 1E21
spectroph., 1E24
in presence of menaquinone or phylloquinone, polarogr., 2E26
of phylloquinone, polarogr., 6E19
— **bisulphite,** detmn. in pharmaceutical preparations, u.v. spectroph., 1E23
Menaquinone, detmn. in presence of menaphthone, polarogr., 2E26
of phylloquinone, polarogr., 6E19
Meobal, see *Carbamic acid, methyl-, 3,4-xylyl ester*
Mepacrine, absorption and fluorescence spectroph. study of, 2E44
Mephentermine, analysis of metabolites of, by g.l.c., 6D29
Meprobamate, chemical-ionisation m.s. study of, 4E31
Mercapto-groups, detmn., fluorim., 2D128
in org. compounds, by g.c., 4C4
in proteins, amperom., 5D75
Mercaptopurine, detmn. in blood serum, by g.l.c., 4D30
Mercury, analytical aspects of environmental, 6H56*B*
a.e.s. study of, 1B52
concn., by co-pptn. on $MnO(OH)_2$, 4B15
liquid chrom., 2B14
with use of three-phase extraction system, 1B11
detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
detection and detmn., by t.l.c., 3B92
detmn., by a.a.s., 5J49
with collection on metallic copper powder, 1B53
with use of copper-wire atomiser, 5B81
with use of micro-probe - flame - adapter atomiser, 3B7

rcury, determination—*continued*
by a.f.s., 2B52, 3B58
by ion exchange - X-ray photo-electron spectrom., 5B15
by n.a.a., with use of multi-element standard, 2B53
by thermom. titration, 6B5
colorim. or spectroph., with use of reagent-impregnated polymer sheet, 3B12
complexom., comparison of titrants for, 4B10
indicators for, 1A6, 3B14
coulom., 6C30
emission spectrom., 5B80
iodim., indirect, 2B11
photom., 4B39, 5B82
potentiom., 4B8
ion-sensitive electrode for, 3B59
spectroph., 3B14, 3B35, 3B36, 3B57, 4B9, 5B7
automated, 3B56
with use of solid reagent, 2B34
stripping chronopotentiom., 5B11
with use of reagent gel column, 1B51
X-ray emission spectrom., concn. on filter-paper for, 4B38
pre-concn. method for, 3B15
in air, by a.a.s., multi-stage sampler for, 3H7
portable collection device for, 4H5
collection on silver gauze for, 1H6
in air-borne dust, by n.a.a., 2H5
in biol. fluids, inter-comparison programme on, 5A3*C*
in biol. materials, by activation analysis, 6A3*C*
by a.a.s., 3D8
by kinetic method, 2A4*C*
by n.a.a., 4D5
standards for, 1D11
in biol. materials in protein-bound form, by gel filtration - n.a.a., 3D11
in blood, by n.a.a., with collection on copper wire, 1D10
in cadmium, spectroph., 1B48
in cereals or seeds, by a.a.s., 3G1
in coal, by a.a.s., 1G5
spectrogr., 6B66
in fish tissues, by a.a.s., 3F4
by n.a.a., 1D9
in fish tissues, in different chemical forms, by a.a.s., 2F3
in foods, by a.a.s., 3G1
comparison of activation methods for, 6F2
in hair, by n.a.a., 1D8
in industrial wastes, in org. form, by a.a.s., 2F3
in milk, 5A5*C*
in minerals, ores or rocks, by a.a.s., 1G5
spectrogr., 6B66
in molasses, collaborative study of, 5G12
in petroleum or petroleum products, by a.a.s., 3C44
by n.a.a., errors due to use of polyethylene phials in, 2C51
in pharmaceutical preparations, by a.a.s., 6E32
in plants, by n.a.a., 5G1
in presence of As, automated potentiom., 2B97
of other elements, by t.l.c. - colorim., 2B15
spectroph., 6B67
in sediments, by a.a.s., 5G6
in situ X-ray emission spectrom., 6H25

Mercury, determination—*continued*
in sediments, in different chemical forms, by a.a.s., 2F3
in soil, by a.a.s., 1G5, 5G6
evolution and collection method for, 4G2
in sugar-beet pulp, collaborative study of, 5G12
in urine, by a.a.s., 6D11
by n.a.a., 4D6
in water, 2A4*C*
by a.a.s., 1H30
collection in soya-bean curd for, 4H20
with collection on silver powder, 4H21
by kinetic method, 2A4*C*
by n.a.a., 2H16
collection on chelating-agent-loaded resin for, 5H18
emission spectrom., 4H39
inter-laboratory study of cold-vapour technique for, 2A4*C*
sample preservation for, 4H19
spectrogr., 1H24
of albumin-bound, in blood serum, gel electroph. - a.a.s., 2D10
of metallic and org., in air, by a.a.s., collection - sepn. assembly for, 5H4
extraction from water or sewage, with use of dithizone-treated polyurethan foams, 1H31
paper-chrom. study of, in butanol - HCl media, 6B30
radiom. method for monitoring losses of, in electrolytic chlorine cells, 5B174
sepn. from Sb, As and Sn, paper electroph., 3B16
from Ba and Ag, from Cd or from Pb and Ag, by ion exchange, 5B20
from Cd and Ca, ion-exchange chrom., 2J17
from Cd, Co, Cu, In and Zn, by ion exchange, 1B2
from Cd, Co, Ag and Sn, by solvent extraction, 2B37
from Cd, Au, Tl and Zn, by solvent extraction, 5B83
from Cd and Zn, ion-exchange chrom., 2B5
from Cu, extraction chrom., 6B64
from Pb, ion-exchange chrom., 5J14
from Pb or Ag, paper electroph., 3B5
from other elements, by g.s.c., 3B83
by solvent extraction, 2B3
from Pt, electroph., 1B167
of Hg^{2+} and CH_3Hg^+, ion-exchange chrom., 2B51
solvent extraction of, as iodomercurate(II) from isobutyl methyl ketone - hexane soln., 4B40
with *OO*-bis-(2-ethylhexyl) phosphorodithioate, 6B67
with *NN*-disubstituted amides, 6B17
with *O*-isopropyl ethylthiocarbamate, 2B3
with metal dithiocarbamates, 5B1
with quaternary ammonium nitrates, 6B1
speciation of air-borne, 5A3*C*
—, **alkyl-,** detmn. in sediments, by steam-distillation - a.a.s., 3H38
—, **methyl-,** detmn. in fish tissues, by g.l.c., 5F13
extraction from water or sewage, with use of dithizone-treated polyurethan foams, 1H31
sepn. from Hg^{2+}, ion-exchange chrom., 2B51
—, —, **chloride,** detmn. in water, by foam sepn. - g.l.c., 1H43
Mercury, reagents for, *p*-anisidine (or *p*-phenylenediamine) - $K_3Cr(CN)_6$, 4B9
Brilliant green, 2B34
dithizone, 1B51, 2B15, 6B67
4-ethyl-2-(2-thiazolylazo)phenol, 3B14

Mercury, reagents for—*continued*
Janus green, 5B82
Pb xanthate, 3B35
2-mercaptobenzimidazole - ClO_4^-, 3B57
pinaverdol, 4B39
1-(2-pyridylazo)-2-naphthol, 3B12
Rhodamine B ethyl ester, 5B7
Se analogues of azolidines, 5B2
thiomaltol, 3B36
Mercury complexes, with 2,2′-dichlorodithizone, 5A9
with picolinaldehyde thiosemicarbazone, 5B16
with thiosemicarbazide, detmn., volum., 6A9
Mercury compounds, decomposition procedure for org., 1C2
detmn. in foods, review, 5F1
of org., in water, by photochem. decomposition - a.a.s. or g.l.c., 1H42
of O in, by carrier-gas method, 2B54
Mesitylene, detmn., by g.l.c., 2C30
Mesoridazine, detmn. in thioridazine, by h.p.l.c., 4E32
Metal complexes, thermoanalytical studies of, review, 2J159
with acetylacetone, I^- and NO_3^-, detmn., amperom., 5B10
Metallurgical analysis, applications of a.a.s. in, 3B6
Metals, see also *Alloys; Cations*
analysis, review of atomisation techniques in a.a.s. methods for, 5J49
detmn., by a.a.s. and a.f.s., applications of tunable lasers in, 6J33
emission spectrom., carbon-cup method for, 6B7
Meteorites, detmn. of Co in iron, spectroph., 2B79
of Au in, by n.a.a., sepn. procedure for, 6B48
of Ir in iron, by n.a.a., 2J155
Methacrylic acid esters, ethyl, detmn. in methyl methacrylate, by g.l.c., 5C58
— —, **glycidyl,** detmn. in its copolymers, i.r. spectroph., 3C77
— —, **methyl,** detection and detmn. of monomeric, in aq. polymer emulsions, by g.c., 3C75
detmn. in industrial wastes, polarogr., 6H53
in its copolymers with acrylonitrile, by pyrolysis - g.l.c., 1C72
of impurities in, by g.l.c., 5C58
Methadienium chloride, identn., by t.l.c. or u.v. spectroph., and detmn., potentiom., 2E29
Methadone, detmn., by oxidation - g.l.c., 4E6
in blood plasma, in unlabelled and ^{2}H-labelled forms, by m.s., 4D24
in blood serum, by oxidation - g.l.c., 4D23
in liver tissue, by g.l.c., comparison of isolation procedures for, 4D22
Methadyl acetate, detmn. in blood plasma, with its metabolites, by g.l.c., 2D30
Methaemoglobin, detmn. in blood, by e.s.r., 5D80
Methandienone, detection, by g.l.c. or m.s., 1D30
Methane, analysis of products of reaction with Cl of, by g.c., 1C17
of pyrolysis products of, by g.c., 6C13
detmn. in air, device for, 1J3
i.r. spectroph., selection of resonant frequencies for, 6H6
in biol. materials or water, by g.c., pre-concn. method for, 5H33
in ethylene, by g.l.c., 4C9
in gas mixtures from combustion or pyrolysis of polymers, by g.c., cold-trap sampling system for, 4C76
of H in, by g.s.c., 1B20
of ^{3}H-labelled, by radio - g.c., 6B19
Methane—*continued*
—, **chloro-,** identn. and detmn. in vinyl chloride, by g.l.c., 1C70
—, **diantipyrinyl-,** as analytical reagent, 4A12
—, **dichloro-,** detmn. in spice oleoresins, by g.c., 4F23
—, **dichlorodifluoro-,** detmn. in biol. tissues, by g.l.c., 1D37
—, **dimethoxy-,** detmn. in presence of formaldehyde, methanol and methyl formate, by g.c., 3C15
—, **diphenyl-, derivatives,** detmn. of *gem*-substituted, by oxidation - g.l.c., 4E6
—, **trichlorofluoro-,** detmn. in biol. tissues, by g.l.c., 1D37
—, **trichloronitro-,** detmn. in wine, by g.l.c., 1F21
—, **tris(hydroxymethyl)amino-,** drying of, 3A4
Methanearsonic acid, detmn. in herbicide formulations or water, by reduction - g.l.c., 6G7
Methanesulphonic acid, hydroxy-, see *Formaldehydesulphoxylic acid*
Methanethiol, detmn. in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
by g.l.c., 5H8
in gas mixtures, by g.c., 4J30
Methanol, detmn., conductim., 5C4
in air, by g.l.c., 5H16
in presence of dimethoxymethane, formaldehyde and methyl formate, by g.c., 3C15
of ^{3}H-labelled, by radio - g.c., 6B19
of total amines and NH_3 in, by kinetic - spectroph. method, 6C18
identn. and detmn. in isobutyl alcohol, by g.l.c., 4C14
in vinyl chloride, by g.l.c., 1C70
—, **bis-(4-chlorophenyl)-, derivatives,** detmn., by g.l.c. of trifluoroacetyl deriv., 3G38
Methimazole, identn., colour reaction for, 6E22
Methiocarb, detection and detmn. in fruit or vegetables, by t.l.c. and g.l.c., 4G37
Methionine, detmn. in feeding-stuffs, by g.l.c. of trimethylsilyl deriv., 6G5
—, ***S*-adenosyl-,** detmn. in biol. tissues, liquid chrom., 5D71
Methomyl, detmn. in presence of other carbamate pesticides, by t.l.c. - enzymic, 2G34
identn. and detmn. in tobacco, by hydrolysis - g.l.c., 3G46
Methoprene, detmn., by g.l.c. or h.p.l.c., review, 3G49
Methoxychlor, detection and detmn. in tinctures or extracts, by t.l.c., 4E47
Methyclothiazide, detmn. in pharmaceutical preparations, polarogr., 6E38
Methylamine, detmn. in presence of di- and trimethylamine, ion-exchange chrom., 5J17
Methyldopa, h.p.l.c. study of, 2E49
Methylephedrine, detmn., potentiom., ion-sensitive electrode for, 5J95
Methylergometrine, detmn. in pharmaceutical preparations, semi-automated fluorim. or spectroph., 4E13
3-*O*-Methylfluorescein phosphatase, see under *Enzymes, specific*
Methylphenidate, thermal decomposition during g.c. - m.s. studies of, 5E37
Methylphenobarbitone, detmn. in blood plasma or blood serum, by g.l.c. of *N*-butyl deriv., 3D34
Methylthiouracil, identn., colour reaction for, 6E22
Metobromuron, identn. and detmn. in presence of other pesticides, by t.l.c., 2G35
Metronidazole, detmn. in blood plasma, by g.l.c. of trimethylsilyl deriv., 1D28

ro-organisms, detmn. of ATP in, by bio-luminescence method, 5D87
of Cr, Ag and Zn in plankton, comparison of methods for, 3D10
of Ti in plankton, photom., 1B92
of uric acid precursors in single-cell protein sources, u.v. spectroph., 5D84
dentn., by g.c. - m.s. analysis of cellular fatty acids, 6A1*C*
roscopy, see also *Electron microscopy*; *Field-ion microscopy*
ample-holder for, with facilities for temp. variation and for monitoring electrical properties of sample, 1J63
k, detection and detmn. of H_2O_2 in uperised, test tablets and enzymic method for, 4F22
letmn. of acaricides in fresh or fermented, by g.l.c. of trifluoroacetyl esters, 3G38
of aflatoxin M_1 in, by t.l.c., 4F9
of As in, by a.a.s., 3F5
of Cd and Hg in, 5A5*C*
of chloramine T in, by g.l.c., as benzoic acid, 3F13
of fat in, 5F29
evaluation of Babcock method for, 4F18
of H_2O_2 in, potentiom., 2J137
of I in, potentiom., with ion-sensitive electrode, or X-ray emission spectrom., 6F17
of ^{131}I in, 1A1*C*
comparison of methods for, 1A1*C*
of lactate and pyruvate in, automated enzymic - photom., 5F30
of [1-^{14}C]lactose in, enzymic - scintillation counting, 4D35
of Pb in evaporated, by a.a.s., effect of time on results in, 5F7
of naphthalophos in, by t.l.c. - fluorim., 3F23
of org. compounds in, by g.c., pre-concn. method for, 5H33
of organochlorine pesticides in, by t.l.c., clean-up procedure for, 3F21
of pesticides in, by sweep co-distillation - g.l.c., 2G27
of protein in, by dye-binding method, comparison of dye formulations for, 2F29
collaborative study of Pro-Milk method for, 2F28
of Se in, fluorim., 5F9
of Ag in condensed, emission spectrom., 2D9
of stilboestrol in, by t.l.c., 3F25
of sulphadiazine in, by t.l.c. - fluorim., 1D27
lentn. and detmn. of (*S*)-3,4-dihydroxybutyrate in, by g.l.c. - m.s. of trimethylsilyl deriv., 2D64
k fat, detection of acetodiacylglycerols in lipids of, by g.l.c. or t.l.c., 3F12
k powder, detection and detmn. of maltol and ethylmaltol in, by t.l.c., 1F4
etmn. of Hg in, emission spectrom., 5B80
of N in, by Kjeldahl method, TiO_2 - $CuSO_4$ catalyst for, 1G11
of H_2O in, time-domain spectrom., 6F16
article size analysis and evaluation of, 5F19
det, detection of *Datura* alkaloids in, by t.l.c., 1F5
erals, ores and rocks, see also *Lunar materials*; *Meteorites*; *Sediments*; *Shale*
nalysis, applications of m.s. in, review, 6J63
computer program for correlation of results of X-ray diffractom. measurements with published data, 1A13
portable X-ray methods in, 6A3*C*
standard reference samples for, 2B159, 2B160
of Canadian reference samples SY-2, SY-3 and MRG-1, 4B168
etection of Th and U in, γ-spectrom., 1B73

Minerals, ores and rocks—*continued*
detmn. of ^{227}Ac in, by n.a.a., 6B91
of alkali metals in, flame spectroph., 2B27
of Al in, flame spectroph., 4B69
of Sb in, by n.a.a., 5B148
of As in, by isotope dilution, 1G8
spectroph., comparison of methods for, 1B152
of As in Pb-containing, X-ray emission spectrom., 5B141
of Ba in, X-ray spectrom., 5B66, 5B67
of Be in, gravim., 6B52
of Bi in, spectroph., 4B19
of B in, by n.a.a., 6B202
of Cd in, by a.a.s., 4B12
of Cs in, flame emission spectroph., 5B34
of CO_2 in, gravim., 4B169
of Cr in, by n.a.a., 6B202
of Cu in, by a.a.s., 5B42
by n.a.a., 4B22, 5B43
of elements in, by a.a.s., 3J59
with direct introduction of powdered sample into flame, 5B217
by charged-particle activation, 2B9
by n.a.a., evaluation of error due to flux non-homogeneity in, 6B230
synthetic multi-element standards for, 6B229
with use of computer, 4A19
spectrogr., 1J37, 4B7, 6B13
rapid procedure for evaluation of spectrograms in, 1B175
with use of argon plasma jet, 1B174
of fluorite in circulating slurries of, on-line n.a.a. method for, 2B44
of Au in, amperom., 2B39, 4B29
anodic-stripping voltamm., 5B48, 6B31
by a.a.s., 1B37
by cupellation - a.a.s., 5B57
comparison of methods for, 6B45
potentiom., 4B29
spectrogr., 5B212
of Ir in, by n.a.a., 3B42, 4B166
of Fe in, by n.a.a., 6B202
polarogr., 2B135
spectroph., 2B132
X-ray spectrom., 5B66
of Fe in Th-bearing, spectroph., 2B134
of Pb in, polarogr., precision and accuracy of method for, 5B71
of Pb isotopes in, by isotope dilution - m.s., 6B133
interferom., 1B91
of Mn in, by n.a.a., 6B202
of Hg in, by a.a.s., 1G5
by n.a.a., with use of multi-element standard, 2B53
emission spectrom., 5B80
spectrogr., 6B66
of Mo in, amperom., 6B180
spectrogr., 1B123
of Ni in, by n.a.a., 6B202
by photon activation, 2B149
gravim., 5B205
spectroph., 4B19
of Os in, by kinetic method, preparation of standard soln. for, 2B155
by n.a.a., 4B111
losses occurring during sample preparation for, 2B157
of Pd in, spectrogr., 5B212
spectroph., 4B19
of Pt in, spectrogr., 5B212
spectroph., 4B19
of K in, by n.a.a., 4B22

Minerals, ores and rocks, determination—*continued*
of precious metals in, reference standard for, 5B209
of Re in, photom., 6B191
spectroph., 5B178
of Re in Cu- and Mo-containing, fluorim., 4B136
of Rh in, spectrogr., 5B212
of Rb in, flame emission spectroph., 5B34
of Ru in, by n.a.a., 4B111
of Sc in, fluorim., 1B62
of Se in, by a.a.s., 1B112
by n.a.a., 4B111
spectroph., 4B110
of Si in, by n.a.a., 5B118
of Ag in, by a.a.s., 4B12
by cupellation - a.a.s., 5B57
by n.a.a., 6B41
of Ag in calcareous, spectroph., background correction for, 5B64
of Na in, by n.a.a., 4B22
of Sr in, spectrogr., 2J72
of S in igneous, by combustion - u.v. spectroph., 3B119
of Te in, by a.a.s., 1B113
spectroph., 4B19
extraction - concn. for, 6B169
of Tl in, by a.a.s., 4B12
of Sn in, by KIO_3 method, effect of metal reducing agent in, 2B81
spectroph., 4B74
X-ray spectrom., 1B89
of Sn present as cassiterite and stannite - kesterite in, volum., 1B88
of Ti in, photom., 1B92
polarogr., 2B135
spectroph., 5B126
X-ray emission spectrom., 5B218
of Ti in Al- and Fe-containing, complexom., 5B125
of W in, by activation method, 4B124
spectroph., 5B172
of U in, by n.a.a., 3B79
fluorim., 1B74
nuclear methods for, 6A3*C*
spectroph., 1B72, 4B59
voltamm., 6B98
of V in, 4B98
of H_2O in Fe-containing, by dynamic Karl Fischer method, 3B146
of Zn in, polarogr., precision and accuracy of method for, 5B71
nucleonic techniques for on-line analysis and control in processing of, 6A3*C*
proposed certification factor for reference, 3B169
sampling procedure for, 1B45
thermal analysis of natural salts, 5A6*C*
thermoanalytical studies of, review, 2J159
—, **carbonate,** detmn. of Pb in, by a.a.s., 4B77
—, **phosphate,** detmn. of Cl^-, F^- and Na^+ in, potentiom., with ion-sensitive electrodes, 5B140
of halides in, potentiom., with ion-sensitive electrode, interference effects in, 4B92
of PO_4^{3-} in, volum., 5G10
—, **silicate,** detmn. of Co in, spectroph., 2B79
of Co, Au, Pb and V in, by a.a.s., 2B77
of elements in, by a.a.s., decomposition method for, 2B76
emission spectrom., with ion-beam excitation, 4J44
with electron micro-probe, sample preparation for, 4B66
X-ray emission spectrom., 4B67
of H and F in, with ion micro-probe, 4B70
Minerals, ores and rocks, silicate, detmn.—*continued*
of Fe in, potentiom., 4B141
of Fe^{II} in, volum., 4B71
of Fe^{III} in, mercurim., 4B72
of Sr in, by a.a.s., 4B68
of Tl in, fluorim., 5B120
of Sn in, by a.a.s., 1B84
of V in, spectroph., 2B78
of Zr in, spectroph., 6B139
sepn. of elements occurring in, ion-exchange chrom., 1B3
—, **sulphide,** detmn. of Pd in, spectroph., 6B223
Minocycline, detmn., fluorim., 2D42
Mirex, identn. of metabolite of, 5G33
Molasses, detmn. of Hg in, collaborative study of, 5G12
of stilboestrol in feed supplements based on, by g.l.c. of trimethylsilyl ether, 2G16
of H_2O in wood, i.r. spectroph., 1C66
Molluscs, detmn. of naphthalene and alkylnaphthalene deriv. in tissues of, u.v. spectroph., 2D55
trace elements in Kingston Basin, 2A4*C*
Molybdate, detmn., potentiom., enzyme electrode for, 3J84
Molybdenite, detmn. of Re in, spectroph., 1B133
of Re in concentrates of, reversed-phase chrom. - u.v. spectroph., 4B137
Molybdenum, detmn., amperom., 6B180
biamperom., 5B167
by a.a.s., 2J86, 3J59, 4B118, 5B165
concn. method for, 4B119
by catalytic - ring-oven method, 4B6
by kinetic - biamperom. method, 1B16
by proton activation, 5B168
by spectroph. titration, 3B129
gravim., 2B119
photom., 4B115
spectroph., 1B122, 2B120, 2B121, 2B122, 2B123, 3B130, 4B9, 4B116, 4B117, 5B166, 6B176, 6B177, 6B178, 6B179
vanadim., indicator for, 4A14
volum., redox indicators for, 1A5
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by a.a.s., 3D8
by n.a.a., 4D5
in ferromolybdenum, spectroph., 3B130, 3B156
in lanthanum or lanthanum oxide, spectrogr., 1B65
in minerals, ores or rocks, spectrogr., 1B123
in plants, by n.a.a., 4D13
direct-reading emission spectrom., 2D5
in sediments, by a.a.s., 6H26
in steel, by a.a.s., 3B148
by m.s., 4B144
emission spectrom., 2B142, 4B145
spectroph., 3B156
comparison of reagents for, 5B199
with ion micro-probe, 2J111
in vanadium, spectrogr., 6B155
in water, by ion exchange - a.a.s., 3H31
spectrogr., 5H19
of C in, by γ-activation, 6B216
by high-temp. oxidation, 5B113
of concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
of ^{131}I in molybdenum-99, γ-spectrom., 6B181
of ^{99}Mo in ^{99m}Tc-containing pharmaceutical products, by t.l.c., paper chrom. or paper electroph., 3E45
of Mo^{III} in presence of Mo^{V} in alkali-metal chloride melts, amperom. or spectroph., 2B20
of Re in, by n.a.a., 5B169
sepn. from Bi, Co, Cu and Ni, by t.l.c., 5B4
from Cr, by solvent extraction, 1B124

lybdenum, separation—*continued*
from Pb, ion-exchange chrom., 6B134
from Pt-group metals, by solvent extraction, 5B210
from Re, by electro-dialysis, 2B130
from Re, W and V, ion-exchange chrom., 4B18
from Ti, by t.l.c., 3B95
solvent extraction of, with esters of dithiocarbamic acids, 4B2
with metal dithiocarbamates, 5B1
with pyrrolidine-1-carbodithioic acid, 4B120
of ^{99}Mo, with tetraphenylarsonium ion from acid soln., 6B189
lybdenum, reagents for, alizarin complexan, 6B177
(α-anilinobenzyl)phosphonic acid octyl ester - SCN⁻, 1B122
p-anisidine (or *p*-phenylenediamine) - $K_3Cr(CN)_6$, 4B9
benzohydroxamic acid, 4B116
Cd (or Zn) ethylxanthate, 6E40
calmagite, 2B122
cresolphthalexon, 5B166
diamminesilver(I) reagent, 2B119
5,7-dibromo-8-hydroxyquinoline, 2B123
dimethyldioctadecylammonium chloride - pyrogallol red, 6B178
dithio-oxamide, 6B176
Eriochrome black T, 2B122, 4B115
2,3,3′,4,4′,5′-hexahydroxybenzophenone, 4B117
magneson KhS, 5B199
mercaptoacetic acid, 5B199
5,5′-methylenedi(salicylic acid), 6B179
3,3′,4,4′,5-pentahydroxybenzophenone, 3B130
rezarson, 5B199
Solochrome black 6 BN, 2B122
sulphonitrazo, 3B156
SCN⁻, 2B120
thymolphthalein, 5B166
toluene-3,4-dithiol, 2B121
2,3,4-trihydroxybenzophenone, 4B117
2′,3′,4′-trihydroxypropiophenone, 4B117
lybdenum alloys, Mo - Fe, detmn. of Mo in, spectroph., 3B130, 3B156, 4B117, 5B166
sepn. of Cu from, by solvent extraction, 6B29
lybdenum complex, with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
lybdenum ores, detmn. of Re in, photom., 6B191
lybdosilicic acids, spectroph. study of aq. soln. of α- and β-, 6B118
nosaccharides, paper-chrom. study of sulphite-liquor, 6C82
sepn., by h.p.l.c., 3C12
rinamide, detmn., alkalim., comparison of methods for, 5E45
rphinan-6-one, 17-cyclopropylmethyl-4,5-epoxy-3,14-dihydroxy-, see *Naltrexone*
17-cyclopropylmethyl-4,5-epoxy-3,6,14-trihydroxy-, see *β-Naltrexol*
rphine, characterisation of samples of, by g.l.c., 2E50
colour reactions of, 3E6
detmn., fluorim., 1E33
in crude drugs, by TAS technique, 2E8
in diamorphine, by g.l.c., 5E11
in urine, by g.l.c. of trimethylsilyl deriv., 2D27
by h.p.l.c. - fluorim., 2D26
dentn. in opium, by g.l.c. - m.s., 6E2
epn. from codeine and papaverine, by t.l.c., 5E9
6-acetyl-, detmn. in diamorphine, by g.l.c., 5E11
in urine, by g.l.c. of trimethylsilyl deriv., 2D27
rpholine, detmn. in effluents, spectroph., 4H46
***N*-tridecyl-2,6-dimethyl-,** t.l.c. study of diastereoisomers of, 1G16
Mountain apple, see under Eugenia *spp.*
Mucopolysaccharides, detmn. of acidic, in blood plasma, liquid chrom. - spectroph., 6D37
fractionation of arterial-wall peptidic, electroph., 3D57
Municipal wastes, detmn. of nitrate-N in, multi-range analytical manifold for automated, 4H40
Muscle tissue, detmn. of methylmalonic and succinic acids in, by g.l.c. of methyl esters, 2D67
of sulphadiazine in, by t.l.c. - fluorim., 1D27
Mussels, detmn. of trace elements in, by m.s., 4F1
Mycotoxins, detection in feeding-stuffs, by dialysis - t.l.c., 5G22
Myelin, sepn. of proteins of, gel electroph., precaution necessary in, 4D62
Myoglobin, detmn. of mercapto-groups in, amperom., 5D75
Myristic acid, detmn., liquid chrom., chromogenic reagent for, 4C21
Myristica fragrans, identn. and detmn. of diphenylpropanoids in, by g.l.c. - m.s. of trimethylsilyl, triethylsilyl or tripropylsilyl deriv., 3E17

N

NAD, see *Nicotinamide–adenine dinucleotide*
NADP, see *Nicotinamide–adenine dinucleotide phosphate*
N.m.r., see *Spectrometry, nuclear magnetic resonance*
Naled, detmn. in formulations, by g.l.c., 5G35
β-Naltrexol, detmn. in urine, by g.l.c. of trimethylsilyl deriv., 3D49
Naltrexone, detmn. in urine, by g.l.c. of trimethylsilyl deriv., 3D49
Naphtha, analysis of S-containing org. compounds in cracked, by g.c. - m.s., 2C57
Naphthacene, sepn. from other hydrocarbons, by h.p.l.c., 2J10
1-Naphthaldehyde, detmn., oscillopolarogr., 2C45
—, **2-hydroxy-, benzoylhydrazone,** as metallofluorescent indicator, 1B27
2-Naphthaldehyde, detmn., oscillopolarogr., 2C45
Naphthalene, computerised calculation of number of possible Cl-substitution products of, 2A20
detmn. in biol. tissues or dispersions in sea-water, u.v. spectroph., 2D55
sepn. from other hydrocarbons, by h.p.l.c., 2J10
—, **2,6-dimethyl-,** detmn. in biol. tissues or dispersions in sea-water, u.v. spectroph., 2D55
—, **1-methyl-,** detmn. in crude methylnaphthalenes, by n.m.r., 4C44
—, **2-methyl-,** detmn. in biol. tissues or dispersions in sea-water, u.v. spectroph., 2D55
in crude methylnaphthalenes, by n.m.r., 4C44
Naphthalene derivatives, detmn. of S impurity in, by combustion - volum., 5C5
—, **alkyl-,** sepn. of isomeric, by g.c., 4C43
—, **chloro-,** detection in wood, by t.l.c., 3C70
identn., interrupted-sweep voltamm., instrument for, 1H20
Naphthalene-2,6-dicarboxylic acid dimethyl ester, isolation and identn. of products of chlorination of, by g.l.c. - m.s., 6C54
Naphthalene-2,7-disulphonic acid, 4-(4-sulphophenylazo)-3-hydroxy-, detmn. in F D & C Yellow No. 6, by t.l.c. - densitom., 2F36
Naphthalene-1-sulphonamide, 4-ethylsulphonyl-, detmn., by g.l.c. of methyl deriv. or fluorim., 2D56
Naphthalenesulphonic acid derivatives, nitro-, detmn. of isomeric, 5C37

Naphthalophos, detmn. in eggs or milk, by t.l.c. - fluorim., 3F23
Naphthenic acid salts, copper, detection in wood, by t.l.c., 3C70
— —, **zinc,** detection in wood, by t.l.c., 3C70
1-Naphthol, detmn. in 2-naphthol, by g.c., 5C36
2-Naphthol, detmn. of 1-naphthol in, by g.c., 5C36
—, **1,1′-methylenebis(-,** see *Squoxin*
Naphthostyril, see *Benz*[cd]*indol*-2(1H)-*one*
1-Naphthylamine, identn. and detmn. in food dyes, by t.l.c., 2F34
2-Naphthylamine, identn. and detmn. in food dyes, by t.l.c., 2F34
Natural gas, see under *Fuel gases*
Neodymium, detmn., by a.a.s., interferences in, 5B100
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in rare-earth concentrates, by n.a.a., 6B85
in steel, X-ray emission spectrom., 3B151
isotopic analysis, by m.s., 5B99
Neodymium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Neomycin, detmn., fluorim., 3D33
Neptunium, detmn., complexom., 3B87
of Np^{V}, Np^{VI} and Np^{VII}, polarogr., 6B102
extraction from molten nitrate media, with copper(II) bis-(2-ethylhexyl) phosphate, 3B17
Nervous tissue, see also *Brain tissue*
detmn. of (3,4-dihydroxyphenyl)acetic, 4-hydroxy-3-methoxyphenylacetic and 3-hydroxy-4-methoxyphenylacetic acids in, by g.l.c. of hexafluoroisopropyl esters of trifluoroacetyl deriv., 2D40
Neuraminic acid, *N*-acetyl-, detmn., spectroph., avoidance of deoxyribose interference in, 2D60
in erythrocyte membranes, purification procedure for use in, 6D59
Neutron-activation analysis, see *Radioactivation analysis, by neutrons*
Nickel, concn., by co-pptn. with iron(III) hydroxide, 5B208
liquid chrom., 2B14
detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
by t.l.c., 2B23
detmn., by a.a.s., 2J86
automated, 2J85
electrolytic pre-concn. method for, 6B8
with use of micro-sampling cup system, 1B15
with use of ultrasonic nebulisation, 3B13
by proton activation, 3B20
colorim. or spectroph., with use of reagent-impregnated polymer sheet, 3B12
complexom., indicators for, 1A6, 3B14
coulom., 6C30
gravim., 1B25, 1B160, 3B24, 5B40, 5B205
potentiom., 5B14, 5B17
spectrogr., 6B16
spectroph., 1B161, 1B162, 3B14, 3B159, 6B140, 6B214
stripping chronopotentiom., 5B11
in air-borne dust, by a.a.s., 2H7
emission spectrom., 4H4
spectrogr., 1H3, 3H5, 3H6
in alkali-metal hydroxides or salts, by chemiluminescence method, 5B30
in aluminium, by a.a.s., 1B56
concn. methods for, 4B46
in beryllium or beryllium alloys, polarogr., 6B57
Nickel, determination—*continued*
in biol. materials, by a.a.s., 3D8
by n.a.a. - Cerenkov counting, 2D7
in biol. tissues, by a.a.s., extraction method for, 3D27
in boric acid, by electrolysis - spectrogr., 5B85
in boron carbide, X-ray spectrom., 4B42
in cadmium, spectroph., 1B48
in carbon, X-ray spectrom., 4B42
in clay, by kinetic method, 6B215
in cobalt alloys, a.c. polarogr., 6B213
in copper alloys, X-ray emission spectrom., 6B35
in glass, by photon activation, 2B149
in iron ore, by n.a.a., 6B202
in lead silicate glasses, by a.a.s., 6B234
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in meat, by a.a.s., 5F5
in minerals, ores or rocks, by a.a.s., with direct introduction of powdered sample into flame, 5B217
by photon activation, 2B149
spectrogr., 6B13
spectroph., 4B19
in petroleum or petroleum products, flame emission spectroph., 6C65
spectrogr., 2C49
in plants, X-ray emission spectrom., 3D7
in plutonium, by a.a.s., 2B67
in presence of Cr and Fe, X-ray spectrom., correction for inter-element effects in, 4B143
of Co, spectroph., 4B156, 5B206, 5B207
of Co and Cu, by t.l.c. - reflectance spectroph., 5B41
of Co and Fe, spectroph., 4B140
of Cu, amperom., 1B163
by h.p.l.c. of Schiff-base chelates, 5B47
of Cu and Fe, by ring-oven t.l.c. - spectroph., 4J15
of Cu and Zn, paper chrom. - spectroph., 6B10
of other elements, by t.l.c. - colorim., 2B15
in sediments, by a.a.s., 6H26
in situ X-ray emission spectrom., 6H25
spectrogr., 2H17
in silicates, X-ray emission spectrom., 4B67
in steel, by a.a.s., 3B148
by m.s., 4B144
by n.a.a., 6B202
emission spectrom., 1B144, 2B142, 4B145
with ion micro-probe, 2J111
X-ray emission spectrom., 6B208
in steel-corrosion products, X-ray spectrogr., 2B139
in tin, by n.a.a., 5B124
in triuranium octaoxide or 'yellow cake', liquid chrom. - spectroph., 2B68
in uranium, by a.a.s., 2B67
in vanadium, spectrogr., 6B155
in water, 6H29
by a.a.s., 2H18
by electro-deposition - spectrogr., 2H20
by n.a.a., 6B20
spectrogr., 5H19
X-ray fluorescence spectrom., concn. methods for, 2H19
of C in, by α-activation, 6B216
by high-temp. oxidation, 5B113
of concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
of Pb in electrolytes for production of, by a.a.s., 1B165

ckel, determination—*continued*
of metallic, in products of reduction of iron ores, dissolution method for, 5B194
of Ag in, spectroph., 3B45
of W in, avoidance of interference in thiocyanate method for, 3B160
sepn. from Bi, Co, Cu and Mo, by t.l.c., 5B4
from Bi or Ag, paper electroph., 3B5
from Cd, Co, Cu, Pb and Zn, ion-exchange chrom., 1J11
from Co, by electro-dialysis, 2B148
from Co, Cu and Fe, by t.l.c., 1B19
from Cu, by solvent extraction, 1B7
from Cu, Fe, Pd and Zn, ion-exchange chrom., 2J18
from Cu, Fe and Zn, ion-exchange chrom., 1B17
from Cu and Pd, by h.p.l.c. of Schiff-base chelates, 6B18
from Cu and Zn, by g.l.c. of salicylaldimine-deriv. complexes, 3B23
from highly saline matrices, by selective pptn., 6B12
from Fe, ion-exchange chrom., 2B5
from Pb, by ion exchange, 5B20
from Pd, by solvent extraction, 6B223
from Th and U, paper chrom., 6B1
from Ti, by t.l.c., 3B95
from V, ion-exchange chrom., 3B115
solvent extraction of, with benzoic acid - butylamine (or pyridine), 6B9
with esters of dithiocarbamic acids, 4B2
with heptanoic acid in presence of aliphatic amines, 2B22
sorption of, on $Al(OH)_3$, $Fe(OH)_3$ and $La(OH)_3$, 2B17
ckel, reagents for, αα′-azinodi-(3-hydroxy-2-picoline), 5B206
2-benzoyl-3′-nitroacetanilide, 5B205
2-carboxy-1-hydroxyanthraquinone, 6B214
chlorindazon DS, 4B156
3′,5′-dichloro-2-hydroxyacetophenone oxime, 1B25
2′,4′-dihydroxyvalerophenone oxime, 5B40
dimethylglyoxime, 4B19
dithio-oxamide, 1B162, 6B10
dithizone, 2B15
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
furil α-dioxime, 5B207
N-hydroxy-*NN*′-diphenylbenzamidine, 1B160
2′-hydroxy-4-methoxy-5′-methylchalcone, 3B24
2-(2-hydroxy-3,5-xylylazo)-4-sulphobenzoic acid, 3B159
poly-(8-hydroxy-5-vinylquinoline), 6B12
purpurinsulphonic acid Na salt, 6B140
1-(2-pyridylazo)-2-naphthol, 3B12, 4B140
se analogues of azolidines, 5B2
thiovioluric acid, 1B161
ckel alloys, detmn. of Al in, spectroph., 5B88
of Bi, Cd, Pb, Ag and Zn in, ion-exchange chrom. - a.a.s., 6B218
of Co in, spectroph., 5B204
of elements in, X-ray spectrom., correction for inter-element effects in, 4B158
of H in, by g.s.c., 3B20
of S in, by isotope-dilution m.s., 6B219
of Sn in, coulom., 1B86
of W in, avoidance of interference in thiocyanate method for, 3B160
Ni - Al, phase analysis, and electrochem. dissolution of, 5B19
Ni - Cr, detmn. of Al in, photom., 5B164
of Ce in, complexom., 1B164
Nickel alloys—*continued*
—, **Ni - Cr - Fe,** analysis, with electron micro-probe, 6J37
—, **Ni - Cu,** detmn. of Cu and Ni in coinage, gravim., 5B40
—, **Ni - Fe,** analysis, X-ray emission spectrom., with use of proton excitation, 6J41
Nickel complexes, with acetylacetone, gel-chrom. study of, 3B20
with aliphatic hydroxamic acids, 6A8
with mono- and di-hydrazones of benzil and 2,2′-pyridil, 5A10
with thiosemicarbazide, detmn., volum., 6A9
Nickel compounds, detmn. of O in, by Unterzaucher carrier-gas method, 6B217
Nickel(II) dialkyldithiocarbamates, sepn., by g.c., 6A1*C*
Nickel ferrate, X-ray photo-electron studies of, 6B212
Nickel(II) hydroxide, X-ray photo-electron studies of, 6B212
Nickel iodide, detmn., by thermom. titration, 4C25
Nickel ores, detmn. of Ir in Cu-containing, by n.a.a., 3B42
of Ni, in, gravim., 5B205
of Pd in Cu-containing, colorim., 6B222
Nickel(II) oxide, X-ray photo-electron studies of, 6B212
Nickel salts, detmn. of Zr in, with concn. by co-pptn., 4B157
Nicotinamide, detmn., differential pulse or d.c. polarogr., 1E21
volum., 1E1
in blood serum, fluorim., 4D70
in cereal products, collaborative study of, 2F49
sepn. from other vitamin B compounds, by t.l.c., 2E22
—, **1-methyl-,** detmn. in blood serum, fluorim., 4D70
Nicotinamide–adenine dinucleotide, reduced, detmn., amperom. or voltamm., 3D108
spectroph., 2A14
voltamm., 5D86
spectroph. data for, 5D85
Nicotinamide–adenine dinucleotide phosphate, isolation of analogues of, 3D109
—, **reduced,** detmn., spectroph., 2A14
voltamm., 5D86
spectroph. data for, 5D85
Nicotine, detmn., by continuous-flow photochemical oxidation - spectroph., 1E3
in blood plasma, by g.l.c., 3D32
in crude drugs, by TAS technique, 2E8
in tobacco, spectroph., 2D91
in urine, by t.l.c. - spectroph., 3D31
— ***N*-oxide,** detmn. in urine, by t.l.c. - spectroph., 3D31
Nicotinic acid, detmn., differential pulse polarogr., 1E21
in cereal products, collaborative study of, 2F49
— **2-diethylaminoethyl ester, citrate,** detmn., spectroph., 1E4
Nifursol, detmn. in frozen turkey tissues, by hydrolysis - g.l.c., 2F40
Niketamide, detmn., volum., 1E1
Niobium, detmn., polarogr., 3B117, 4B103
spectroph., 1B107
in lanthanum or lanthanum oxide, spectrogr., 1B65
in lead - zirconium titanate ceramics, spectroph., 6B237
in pyrochlore, spectroph., 3B116

Niobium, determination—*continued*
in steel, emission spectrom., 1B144, 4B145
interference by Mn in, 3B155
spectroph., 3B116
volum., 4B149
with ion micro-probe, 2J111
in tantalum, by ion exchange - spectroph., 1B109
in water, in presence of Tc, Te and Zr, sepn. scheme for, 6B21
of C in, by high-temp. oxidation, 5B113
of C, N and O in thin films of, by ^{6}Li activation, 5B154
of concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
of H in, by g.s.c., 3B20
of N in, by γ-activation, 2B89
by Kjeldahl distillation - coulom., 4B83
of Ta in, photom., 4B104
sepn. from Pb, ion-exchange chrom., 6B134
from Ta, by solvent extraction, 6B157
solvent extraction of, with amine oxides, 3B80
with amines, 5B153
with esters of dithiocarbamic acids, 4B2
with O-containing solvents from aq. HF media, 4B102
sorption of ^{95}Nb from U-containing soln. on tin(IV) phosphate, 1B78
Niobium, reagents for, chlorsulphophenol S, 1B109
5-nitrosalicylic acid, 3B116
3-nitro-5-sulphosalicylic acid, 1B107
4-(2-pyridylazo)resorcinol, 6B237
Niobium alloys, detmn. of Mo in, spectroph., 2B120
of N in, by inert-gas fusion - spectroph., 2B107
—, **Nb - Fe,** analysis, sample preparation for, 4B142
Niobium silicide, d.t.a. of, 5A6*C*
Niphimycin, sepn. of constituents of, by t.l.c. - liquid chrom., 2E20
Nitrate, detmn., potentiom., with ion-sensitive electrode, 4B88
spectroph., 2H33
in clover or grass, potentiom., with ion-sensitive electrode, 2G10
in foods, potentiom., with ion-sensitive electrode, 4F4
review, 5F8
in industrial wastes, sample preservation for, 3H45
u.v. spectroph., 2H47
in meat products, automated, 6F13
in radioactive-waste supernate, laser - Raman spectrom., 4H37
in sediments, automated colorim., 3H23
in water, automated colorim., 3H23
automated dilution for, 5H26
by g.c., 6A1*C*
potentiom., electrodes for, 3B105, 3H24
Nitrate-nitrogen, detmn. in municipal waste or manure, multi-range analytical manifold for automated, 4H40
in plants or soil, potentiom., with ion-sensitive electrode, 3G9
in water or waste water, potentiom., with NH_3-sensing electrode, 4H24
Nitrazepam, detmn. in biol. fluids or pharmaceutical preparations, spectroph., 5E35
in blood serum, by g.l.c., as 2-amino-5-nitrobenzophenone, 4D18
in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
in presence of its decomposition products, by t.l.c. - spectroph., 5E34
Nitrazepam—*continued*
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
Nitric acid, automatic device for monitoring concn of, 4J2
detmn. in nitration acid for TNT production, liquid chrom., 1C83
in presence of fluorenecarboxylic acid and H_2SO_4, by h.f. titration, 6C55
of weaker acids, potentiom., 3A8
in soln. of spent nuclear fuels, by thermom. titration, 1B77
in used pickling baths, evaluation of quinhydrone electrode for use in, 2B91
explosion hazard from mixtures with surfactant of, 4A22
solvent extraction of, with tributyl phosphate from alcohol or acetone soln., 1B76
— **esters,** detmn. in pharmaceutical preparations, by kinetic - colorim. method, 2E34
Nitrides, detmn. of N in, by He extraction - g.c., 5B156
Nitriles, detection of α-substituted, by chemiluminescence method, 2C23
detection and detmn. in rapeseed oil, by t.l.c. - g.l.c., 2F8
Nitrite, detmn., fluorim., 1B103
potentiom., 5B132
spectroph., 2H32, 3B106
in foods, review, 5F8
in industrial wastes, sample preservation for, 3H45
in meat, filter-paper as source of error in, 4F17
in meat products, automated, 6F13
in presence of NO_3^-, u.v. spectroph., 4B87
in radioactive-waste supernate, laser - Raman spectrom., 4H37
in water, by g.c., 6A1*C*
Nitro-compounds, detmn., volum., 6C50, 6C96
in air, sorbents for, 1H14
—, **aromatic,** detmn., by t.l.c. - fluorim., 4D20
Nitrofurazone, detmn., fluorim., 2E52
Nitrogen, see also *Amide-nitrogen*; *Amino-nitrogen*; *Ammonia-nitrogen*; *Hydrazide-nitrogen*; *Nitrate-nitrogen*; *Protein-nitrogen*
detmn., by Kjeldahl method, still-head for use in, 3J8
by phenol - hypochlorite reaction, comparison of methods for, 6B144
with electron micro-probe, 2J66, 3B19
in beer or wort, automated spectroph., 5F48
in brewing materials, review of automated and semi-automated methods for, 4F28
in coal, by n.a.a., 5A5*C*
in feeding-stuffs, by Kjeldahl method, TiO_2 - $CuSO_4$ catalyst for, 1G11
in fertilisers, by Kjeldahl method, 3G13
in industrial wastes, sample preservation for, 3H45
in iron, polarogr., 6B203
in lithium, colorim., 2B28
in metals, by α-activation, 2B89
by Kjeldahl distillation - coulom., 4B83
in niobium alloys, by inert-gas fusion - spectroph., 2B107
in niobium films, by ^{6}Li activation, 5B154
in nitrides, by He extraction - g.c., 5B156
in org. compounds, see under *Organic elementary analysis*
in plants, standards for, 2D4
in refractory materials, by g.s.c., 3B20
in steel, by He fusion - g.s.c., 6B204
polarogr., 6B203

rogen, determination—*continued*
in sulphur hexafluoride, B.S.I. method for, 3B120
in textiles, by H_2SO_4 oxidation - colorim., 3C73
in water, by automated Kjeldahl method, 3H25
of ammonia-, nitrate- and org., in water or waste water, potentiom., with NH_3-sensing electrode, 4H24
of bound, in uranium hexafluoride, with use of NH_4^+-sensitive electrode, 2A7*C*
of different chemical forms of, in steel, automated spectroph., 1B147
of distribution of, in solids, by charged-particle activation, 5B116
of H in, by g.s.c., 1B20
of inorg., in water, by reduction - potentiom., with air-gap electrode, 5H25
of ^{15}N in biol. materials, by m.s. or emission spectrom., review, 3D16
in urine, emission spectrom., 1D14
of N_2O in, by g.c., 5J26
of non-protein, in whey, 6F19
of org., in soil, by dye-binding method, 1G9
of org. compounds in, by g.c., use of graphitised carbon black as trapping material in, 4H13
of SO_2 in, deriv. spectroph., 2J92
sotopic analysis, by m.s., cryostat for use in, 6J4
of urinary, by m.s., 1D15
dissolved, detmn. in water, by g.c., 5H23
rogen compounds, sepn. and detmn. of heterocyclic, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
rogen oxides, analysis of soln. used to absorb, u.v. spectroph., 4B89
letmn. in power-plant emissions, 3A1*C*
in gas mixtures, by g.c., 6A1*C*
spectroph., 5H6
in stack gases, potentiom., with NO_3^--sensitive electrode, 2H10
nulti-point sampling technique for, 3A1*C*
N_2O, detmn. in air, i.r. spectroph., selection of resonant frequencies for, 6H6
in nitrogen, by g.c., 5J26
NO, detmn., by g.s.c., pre-treatment of stationary phase for, 2J35
in air, spectroph., 2H9
in stack gases, with in-stack dispersive spectrometer, 5H3
NO_2, detmn. in air, by alkali trapping - fluorim., 6H8
coulom., 4H11
fluorim., with laser excitation, 1H10
review, 3H1
spectroph., 2H9
coglycerin, see *Glyceryl trinitrate*
co-groups, detmn., gasom., 6C9
Nitrosamines, detection and detmn., by h.p.l.c., selective detector for, 2F14
etection and detmn. in foods or biol. materials, with use of thermal-energy analyser, 2F12, 2F13
etmn., by g.l.c., 4F5
volum., 6C50, 6C96
in air, sorbents for, 1H14
in cured meats and related products, by g.l.c. - m.s., 2F15
in foods, by g.c., 4F6, 6F5
by g.l.c. and g.l.c. - m.s., 5F12
review, 5F1
in meat or meat products, by steam-distillation - g.l.c. or t.l.c., 3F9

***N*-Nitrosamines,** determination—*continued*
in tobacco smoke, by g.l.c. and g.l.c. - m.s., 2D89
in water, by g.l.c., 5H35
formation and analysis, review, 5F11
Nitroso-compounds, polarogr. and spectroph. study of *C*- and *N*-, 3C25
Nitroso-groups, detmn., gasom., 6C9
Nitrovin, detmn. of purity of, u.v. spectroph., 6E42
Noble gases, detmn. in gas mixtures, by titanium-sublimation-pump method, 2B24
Nonane, detection and detmn. in hexane, 3C8
6-*trans*-Nonenal, identn. in stored hydrogenated soya-bean oil, by g.l.c. - i.r. spectroph. - m.s., 3F47
Noradrenaline, detmn., automated fluorim., 3D89
volum., 1E1
in blood plasma, blood serum, erythrocytes or urine, by g.l.c., 1D25
in presence of adrenaline, fluorim., 1E8
in urine, improved trihydroxyindole method for, 2D88
liquid chrom. - fluorim., 6D55
Norborn-5-ene-2,3-dicarboximide, *N*-(2-ethylhexyl)-, detmn., by g.l.c., 2G37
Norcodeine, detmn. in blood serum, by g.l.c., 6D16
Nordextropropoxyphene, detmn. in blood plasma, by g.c., 4A1*C*
Norepinephrine, see *Noradrenaline*
Nornicotine, *N*-nitroso-, sepn. from *N*-nitrosoanabasine and -anatabine, by t.l.c., 2D90
—, ***N'*-nitroso-,** detmn. in tobacco or tobacco products, by h.p.l.c., 6D58
Nortriptyline, detmn. in presence of amitriptyline, by h.p.l.c., 3D39
Noxiptyline hydrochloride, detmn. in pharmaceutical preparations, spectroph., 1E36
Nuclear magnetic resonance spectrometry, see *Spectrometry, nuclear magnetic resonance*
Nuclear technology, report of conference on analytical chemistry in, 2A7
Nuclear-reactor coolants, analysis of corrosion particles in, electron microsc. - X-ray spectrom., 2A4*C*
detmn. of ^3H in water, by liquid scintillation counting, 5B27
of Nb, Tc, Te and Zr in water, sepn. scheme for, 6B21
of trace metals in water, by n.a.a., 6B20
Nuclear-reactor fuels, analysis, by m.s., 2A7*C*
assay of FFTF rods, calorim., 6A3*C*
detmn. of ^3H in, by liquid scintillation counting, 5B27
of HNO_3 and U in soln. of spent, by thermom. titration, 1B77
of O-to-metal ratio in Pu-bearing, 5B110
of Pu and U in, 6B239*B*
Nucleic acids, detmn. in peas, fluorim., 3G3
sepn., and sepn. of constituents of, by g.c., derivatisation for, review, 5J27
—, **deoxyribo-,** analysis, prevention of non-specific degradation in, 2D138
—, **ribo-,** detmn. of 5-fluorocytidine and 5-fluorouridine in, by h.p.l.c., 3D107
fractionation, liquid chrom., comparison of binding materials for, 5D82
sepn. of constituents of, by t.l.c., 4D66
of low-mol.-wt., gel electroph., 5D83
of 28S and 18S ribosomal, gel chrom., 2D135
Nucleosidase, see under *Enzymes, specific*
Nucleosides, sepn., by g.c., derivatisation for, review, 5J27
sepn. and detmn., ion-exchange chrom., 3E3
—, **diribo-, monophosphates,** t.l.c. study of, 2D136

5′-Nucleotidase, see under *Enzymes, specific*
Nucleotides, analysis, performance of micro-particle chemically-bonded anion-exchange resins in, 6A1*C*
sepn., by g.c., derivatisation for, review, 5J27
of tissue, ion-exchange chrom., 5A2*C*
sepn. and identn. of pyridine, liquid chrom., 3D109
Nutmeg, see Myristica fragrans
Nylon, detmn. of H_2O in fibres of 66, by n.m.r., 1C67
differentiation between 6 and 66, by hydrolysis - paper chrom., 4C74
Nystatin, detmn., spectroph., 2E17
in presence of its degradation products, u.v. spectroph., with use of orthogonal-polynomials method, 1E15

O

Oats, detmn. of oil, protein and H_2O in, near-i.r. reflectance spectroph., 3G5
9,12-Octadecadienoic acid, identn. and detmn. of *cis,cis-* and *trans,trans-*, in tobacco-smoke condensate, by g.l.c. of methyl ester, 2D62
***cis,cis*-Octadecadienoic acids,** identn., by hydroxylation - g.l.c. - m.s., 5D47
2-*trans*,6-*trans*-Octadienal, identn. in stored hydrogenated soya-bean oil, by g.l.c. - i.r. spectroph. - m.s., 3F47
***cis*-9-Octadecenoic acid,** identn. and detmn. in tobacco-smoke condensate, by g.l.c. of methyl ester, 2D62
Octanoic acid, detmn. in beer, by g.l.c., 1F16
— **ethyl ester,** detmn. in beer, by g.l.c., 1F16
Oct-2-ene, sepn. of geometrical isomers of, liquid chrom., 6C17
Oestradiol, detmn. in presence of other oestrogens, by g.l.c. of trimethylsilyl deriv., 4D49
of conjugated or esterified, in tablets, by t.l.c. - u.v. spectroph., 4E41
of specific radioactivity of ^3H- or ^{14}C-labelled, by g.l.c. of trimethylsilyl ether - liquid scintillation counting, 1E20
—, **ethynyl-,** detmn. in pharmaceutical preparations, spectroph., 2E48
—, **2-hydroxy-,** see *Oestra*-1,2,5(10)-*triene*-2,3,17β-*triol*
Oestra-1,2,5(10)-triene-2,3,17β-triol, identn. in urine, scheme for, 4D50
Oestriol, detmn. in blood plasma, fluorim., 6D48
in presence of other oestrogens, by g.l.c. of trimethylsilyl deriv., 4D49
in urine, by t.l.c. - fluorim., 3D79
by t.l.c. - spectroph., 5D57
enzymic hydrolysis procedure for use in, 1D56
of specific radioactivity of ^3H-labelled, by g.l.c. of trimethylsilyl ether - liquid scintillation counting, 1E20
— **16-glucuronide,** detmn. in urine, spectroph., 6D49
Oestriol, 17α-ethynyl-, 3-cyclopentyl ether, detmn. in pharmaceutical preparations, by g.l.c., 2E47
Oestrogens, detmn. in urine, avoidance of interferences in, 2D83
spectroph., 1D55
of conjugated, in pharmaceutical preparations or raw materials, by g.l.c. of trimethylsilyl deriv., 3E25
gel-chrom. study of, 3E24
Oestrogens—*continued*
sepn. of endogenous and phyto-, gel chrom. - paper chrom., 4D48
sepn. and detmn., by g.l.c. of trimethylsilyl deriv., 4D49
t.l.c. study of, 2E46
Oestrone, detmn. in pharmaceutical preparations - complexom., 1E18
in presence of other oestrogens, by g.l.c. of trimethylsilyl deriv., 4D49
of conjugated or esterified, in tablets, by t.l.c. - u.v. spectroph., 4E41
of specific radioactivity of ^3H-labelled, by g.l.c. of trimethylsilyl ether - liquid scintillation counting, 1E20
Oilseeds, analysis, applications of near-i.r. reflectance-spectroph. methods in, 3G5
detection and detmn. of acetone and propan-2-ol in meals and flours of, by g.l.c., 4G18
detmn. of oil content of, by ring-oven method, 5F62
Oleic acid, detmn. in blood serum, by g.l.c., 6D40
— **methyl ester,** sepn. from methyl elaidate, liquid chrom., 6C17
Olive oil, detection of rapeseed oil in, 5F63
detmn. of amide- or amine-N in, by acidic extraction - Kjeldahl method, 3F50
validity of pancreatic-lipase method for control of sansa, 4F37
Olivetol, see *Resorcinol, 5-pentyl-*
Olivine, detmn. of Ti in, spectroph., 5B126
Omite, detmn. in cotton seeds, ground-nuts or maize, by g.l.c., 1G22
Onions, detmn. of lachrymatory factor in, by t.l.c. - spectroph., 3F14
of paraquat in, by g.l.c., 6G6
of thiopropanal *S*-oxide in, u.v. spectroph., 5F36
Opium, identn. of codeine and morphine in, by g.l.c. - m.s., 6E2
Opium alkaloids, sepn. and detmn., by h.p.l.c., 4E11
Optical devices, averaging spheres for visible and u.v. wavelengths, 2J54
component mounts for, 1J28
detmn. of elements in glass or silica fibres, spectrogr., 3B172
floating mount for, 5J38
for axis variation of angle of incidence of radiation beam, 2J118
production and characterisation of moisture-resistant coatings for, 5J36
silver mirrors coated with thin layers of alumina plus reactively deposited silicon oxide, 5J37
use of heat-shrinkable tubing for mounting windows for, 2J46
Orange juice, detmn. of NH_4^+ and K^+ in, ion-exchange chrom., 5J17
Oranges, detmn. of carbamate and urea herbicides in, by g.l.c. of methyl deriv., 5F45
Orcinol, sepn. from methoxyphenol and phenol, by h.p.l.c., 2J10
Ores, see *Minerals, ores and rocks*
Organic analysis, 6C100*B*
Organic compounds, analysis, by g.l.c. - i.r. spectroph., 3C1
of three-component soln. of, by partial extraction - refractom., 5C3
characterisation of purity of, by detmn. of heats of fusion and dissolution, 5A6*C*
by measurement of capacitance changes during melting of sample, 5C1
identn. of non-volatile, by m.s., 4C1

ganic compounds—*continued*
mechanised system for wet-decomposition of, 1C1
methods for studying colour reactions of, 6C44
methods of factor analysis of mass spectra of, 2C3
programmed simult. evaluation of characteristic bands in Raman and i.r. spectra of, 2C2
structural analysis, by ^{13}C n.m.r., 2A1*C*
ganic elementary analysis, detection of Cl, I, N and S, with use of ion-exchange-resin beads, 3C4
detmn. of Br (or I) and Cl, by combustion - potentiom., 2C7
of Br, Cl and I, by Li decomposition - potentiom., 5C6
of Br, Cl, I and N, by combustion - volum., 6C3
of C and H, by combustion - gravim., 6C2
halogen adsorbent for use in, 1C7
of ^{14}C and ^{3}H, as doubly labelled methane, 2C5
of C and H in org. phosphine deriv., comparison of catalysts for, 2C6
of C, H and N, by combustion - frontal g.s.c., automated, 1C6
of C, H and N in drugs, or in binary mixtures of drugs, by oxidation - g.s.c., automated, 2E3
of F in presence of P, by combustion - spectroph., 2C8
of F and S, by combustion - potentiom. - volum., 6C6
of halogens and S, by combustion - gravim., 6C5
of N in amines or amides, by $KHSO_4$ fusion - coulom., 3C2
of N and S, by combustion - volum., 5C7
of P, by combustion - iodim., 3C5
of P in difficultly combustible substances, O-flask combustion method for, 6C7
of S, by Al fusion - volum., 5C9
by combustion - coulom., 5C8
by K fusion - iodim., 3C3
by Schoniger combustion - volum., 6C4
of S in presence of interfering elements, by combustion - indirect complexom., 2C9
review of X-ray spectrom. methods for detmn. of trace elements, 1C5
ranometallic compounds, analysis, 3C94*B*
bac, see *Carbamic acid, methyl-, 2-s-butylphenyl ester*
nium, catalytic activity of dil. soln. of, 2B155
detmn., by kinetic - spectroph. method, 1B169
spectroph., 3B168
voltamm., 5B216
in biol. materials, by n.a.a., 4B111
in minerals, ores or rocks, by n.a.a., 4B111
losses occurring during sample preparation for, 2B157
reference standard for, 5B209
in presence of Ir and Pd, spectroph., 5B214
of Ir and Pt, spectroph., 6B224
of other elements in complex industrial soln., by electro-dialysis - photom., 6B225
of Re, spectroph., 2B156
of Ru, spectroph., 1B168
otopic analysis, spectrogr., 5B215
pn. from Cu, Ru and Zn, electroph., 1B167
from other elements, by g.s.c., 3B83
by solvent extraction, 5B210
olvent extraction of, with esters of dithiocarbamic acids, 4B2
Osmium, solvent extraction of—*continued*
with organophosphorus compounds - $SnBr_2$, 6B220
with quaternary ammonium nitrates, 6B1
sorption of, on sulphides from acid soln., 4B3
Osmium, reagents for, dithiobenzoic acid, 2B156, 5B214
6-(ethylthio)-3-hydroxy-5-mercapto-1,2,4-triazine, 6B224
2-mercaptobenzimidazole, 1B168
6-methylpicolinaldehyde thiosemicarbazone, 4B166
thiourea, 3B168
Ovalbumin, detmn. of mercapto-groups in, amperom., 5D75
isolation of *N*-methylated basic amino-acids from hydrolysates of, ion-exchange chrom., 2D101
Oxacillin, detmn., spectroph., 6E11
Oxacillin derivatives, detmn., spectroph., 6E11
1,2,4-Oxadiazole, 5-diethylaminoethyl-3-phenyl-, citrate, detmn., spectroph., 1E4
Oxalacetic acid, identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
Oxalate, detmn. in iron(II) oxalate, volum., 4E4
Oxalic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
in presence of HCl or HNO_3, potentiom., 3A8
in urine, spectroph., 3D66
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
— **salts, iron(II),** detmn. of Fe^{II} and oxalate in, volum., 4E4
— —, **lead,** detmn. of Ca in, by a.a.s., 2C21
Oxazepam, detmn. in pharmaceutical preparations, colorim. or u.v. spectroph., 5E33
sepn. from other benzodiazepine deriv. and identn., by t.l.c., 1E34
Oxazolidinethione, vinyl-, contents of rapeseed and rapeseed oil of, 2G13
Oxazolo[3,2-*d*][1,4]benzodiazepin-6-one, 10-chloro-11*b*-(2-chlorophenyl)-2,3,5,6,7,11*b*-hexahydro-, see *Cloxazolam*
Oxides, detmn. of elements in, X-ray emission spectrom., spectrum-fitting technique for, 3J57
of O in, by He extraction - g.c., 5B156
Oxime groups, detmn., gasom., 6C9
Oxonium salts, field-desorption m.s. study of, 2C4
—, **ethyl(tetramethylene)-,** detmn., polarogr., 6C19
—, **triethyl-,** detmn., polarogr., 6C19
Oxycarboxin, sepn. from other fungicides, paper chrom., 3G25
Oxygen, see also *Ozone*
analyser for detmn. of contaminants in, 2A1*C*
detmn., by γ- or proton activation, 4B105
by n.a.a., 5J107
with electron micro-probe, 2J66, 3B19
in brewing materials, review of automated and semi-automated methods for, 4F28
in coal, by n.a.a., 5A5*C*
in contents of beer bottles, gasom., 5F55
in copper, by ^{3}He-particle activation, 5B50
by H reduction - frontal g.c., 6B33
in gas mixtures, by chemiluminescence method, 3A1*C*
with N, by g.c., 4B106
in germanium, by α-activation, 3B90
in indium compounds, gravim., 3B67
in mercury compounds, by carrier-gas method, 2B54
in metals, comparison of methods for, 5B155

Oxygen, determination—*continued*
in nickel compounds, by Unterzaucher carrier-gas method, 6B217
in niobium films, by ^{6}Li activation, 5B154
in oil additives, by n.a.a., 3C55
in oxides, by He extraction - g.c., 5B156
in power-plant emissions, 3A1*C*
in refractory materials, by g.s.c., 3B20
in steel, by reductive fusion - coulom., 1B153
by vacuum fusion - i.r. spectroph., 6B204
in sulphur hexafluoride, B.S.I. method for, 3B120
in Zircaloy surfaces, by charged-particle activation, 3B101
of distribution of, in boron, by proton activation, 2J156
of H in, by g.s.c., 1B20
of ^{17}O and ^{18}O in ^{238}Pu materials, γ-spectrom., 2A7*C*, 2B70
of ^{18}O in water, by charged-particle activation, 1A1*C*
of pO_2 in fluids or gases, fluorim. probe for, 4J51
on surfaces of gallium arsenide, germanium or silicon, by laser sampling - m.s., 5B8
isotopic analysis, by m.s., cryostat for use in, 6J4
sepn. from H, Kr and Xe, by g.c., 3B84
—, dissolved, detmn. in beer, comparison of commercial analysers for, 4F32
in beer or wort, potentiom., with O-selective electrode, 5F54
in water, by g.c., 5H23
Ozone, detmn., iodim., 2H11
in air, by chemiluminescence method, 6H10
spectroph., 3H10
selection of resonant frequencies for i.r., 6H6
review of literature concerning chemistry and technology of, 2B164*B*

P

PAP, see *Adenosine 3′-phosphate 5′-phosphate*
PAPS, see *Adenosine 3′-phosphate 5′-sulphatophosphate*
Packaging materials, detmn. of total migration from plastic, with use of ^{14}C-labelled fat simulant, 1F1
Paints, see also *Lacquers*; *Pigments*
analysis of electro-deposition, gel chrom., 4C88
of head-space vapours of, by g.l.c., 4C90
comparison of samples of, by n.a.a., 2A10
detection and detmn. of Cd and Pb in, by a.a.s., 1C8
detmn. of Cd and Pb in, by a.a.s., 1C77
of free-pigment content of, as measure of weathering, radiom., 3C89
of Pb in, by a.a.s., B.S.I. method for, 2C84
of solvent retention in alkyd-resin, radiom., 3C87
d.t.a., thermogravim. and differential thermogravim. studies of binders for, 4C89
expression of content of functional groups in binders for, 3C88
identn. and detmn. of carboxylic acids in alkyd resins for, by g.l.c., preparation of methyl esters for, 3F49
pyrolysis - g.l.c. study of black, 5C61
Palladium, detection, colour reaction for, 6A10
detmn., by a.a.s., with use of micro-probe - flame - adapter atomiser, 3B7
Palladium, determination—*continued*
by catalytic - colorim. method, 3B163
gravim., 1B170, 3B24
photom., 3B164
spectrogr., 1B166
spectroph., 1B171, 2B152, 2B153, 3B165, 3B166, 3B167, 4B163
prediction of conditions for, 5B53
in biol. tissues, by a.a.s., 5D15
in catalysts, by H or O adsorption - g.c., 4B165
in copper, by n.a.a., 5B52
in Cu - Ni ores, colorim., 6B222
in copper-based standard reference materials, by n.a.a., 6B36
in gold, spectroph., 4B31
in industrial materials, by X-ray fluorescence analysis, 4B17
in minerals, ores or rocks, reference standard for, 5B209
spectrogr., 5B212
spectroph., 4B19
in presence of Cu, spectroph., 4B164
of Cu and Au, spectroph., 1B172
of Cu, Ni and Fe, spectroph., extraction method for, 6B223
of Ir, amperom., 6B226
of Ir and Os, spectroph., 5B214
of other elements, by a.a.s., 4B160
by t.l.c. - colorim., 2B15
of Pt, spectroph., 2B154
in water, spectrogr., 1H24
sepn. from Cu, Fe, Ni and Zn, ion-exchange chrom., 2J18
from Cu and Ni, by h.p.l.c. of Schiff-base chelates, 6B18
from Hg, by solvent extraction, 6B67
from other elements, by solvent extraction, 5B210
from Pt, electroph., 1B167
from Pt and Ru, by t.l.c., 1B19
solvent extraction of, with aliphatic amines, 2B21
with 2,4-dimethylpentan-3-one oxime or heptan-4-one oxime, 2B154
with esters of dithiocarbamic acids, 4B2
with organophosphorus compounds - $SnBr_2$, 6B220
sorption of, on sulphides from acid soln., 4B3
Palladium, reagents for, 4-amino-6-hydroxy-2-mercaptopyrimidine, 6A10
antipyrine (or other org. bases) - quinoxaline-2,3-dithiol, 4B163
biacetyl monoxime, 2B152
bis(dimethoxyphosphinothioyl) disulphide, 2B153
NN′-didodecyldithio-oxamide, 4B19
p-dimethylaminobenzylidenerhodanine, 5B53
di-2-pyridyl ketoxime, 2B154, 6B223
dithiobenzoic acid, 5B214
dithizone, 2B15
4-(3-formyl-4-hydroxyphenylazo)benzene-sulphonic acid Na salt, 3B167
α-furil dioxime, 4B31
furylpentadienal thiosemicarbazone, 3B165
2-hydroxyiminoacetoacetanilide benzoylhydrazone, 1B170
2-hydroxyiminoaceto-*o*-toluidide benzoylhydrazone, 1B170
2′-hydroxy-4-methoxy-5′-methylchalcone, 3B24
2′-hydroxy-4-methoxy-5′-methylchalcone oxime, 4B164
syn-phenyl 2-pyridyl ketoxime, 1B172
K propylxanthate, 3B166
thioridazine hydrochloride, 1B171

dium complex, with thiourea, detmn. of S in, volum., 2B113
oil, detmn. of solid-fat content of, comparison of pulsed and wide-line n.m.r. and dilatometry for, 2F45
itic acid, detmn., liquid chrom., chromogenic reagent for, 4C21
in blood serum, by g.l.c., 6D40
itoleic acid, detmn. in blood serum, by g.l.c., 6D40
othenic acid, detmn., by g.l.c., 5E25
alcium salt, sepn. from other vitamin B compounds, by t.l.c., 2E22
averaldine, sepn. from papaverine, by t.l.c., 3E8
averine, comparison of reagents for pptn. of, 5E8
tmn. in analgesic tablets, by g.l.c., 6E4
in crude drugs, by TAS technique, 2E8
in pharmaceutical preparations, volum., 4E12
in presence of phenobarbitone, reserpine and theobromine, spectroph., 5E10
pn. from codeine and morphine, by t.l.c., 5E9
from papaveraldine or papaverinol, by t.l.c., 3E8
ydrochloride, detmn., volum., 2E6
averinol, sepn. from papaverine, by t.l.c., 3E8
er, analysis of products of manufacture of, problems in automated, 5C50
of surface coatings and finishes for, 5C51
pplications of thermal analysis in production of, 6C80
tection and detmn. of Cd and Pb in, by a.a.s., 1C8
tmn. of Cu and Pb in filter-, by a.a.s., 4D4
of elements in, by a.a.s., 3J59
review of atomisation techniques in, 5J49
of Hg in filter-, emission spectrom., 5B80
of phenol - formaldehyde resins in, problems arising in, 6C83
liquors from, detmn. of aldonic and uronic acids in sulphite spent, by g.l.c. of corresponding alditol acetates, 3C72
of Na_2S in black, review of continuous methods for, 2C69
of S compounds in, polarogr., 3C71
of S compounds in black, automated potentiom., 6C81
of H_2O in highly viscous, i.r. spectroph., 1C66
aper-chrom. study of monosaccharides of sulphite, 6C82
er pulp, detmn. of H_2O in, i.r. spectroph., 1C66
erboard, see *Cardboard*
rika, detmn. of capsaicin in ground, by t.l.c., 5F38
acetamol, detmn., fluorim., and detmn. of 4-aminophenol in, fluorim, 2E33
in analgesic tablets, by g.l.c., 6E4
in presence of aspirin, caffeine and phenacetin, by t.l.c., 4E27
of aspirin, caffeine, phenacetin and salicylamide, by h.p.l.c., 1E27
of aspirin and salicylamide, non-aq. potentiom., 4E28
of dichloralphenazone, spectroph., 4E29
entn. and detmn. in blood plasma in presence of barbiturates, by g.l.c. of *O*-benzoyl or trimethylsilyl deriv., 2D34
affin wax, detmn. of degree of hydrolysis of borate ester, i.r. spectroph., 2C61
axon, detmn. in liver tissue, by g.l.c. or enzymic, 2D54
aquat, detmn. in carrots, lettuce or onions, by g.l.c., 6G6
Paraquat determination—*continued*
in faeces, gastric contents or urine, by t.l.c., 1D36
Parathion, detection and identn., by t.l.c., 4G35
detmn. in blood, polarogr., 5D35
in liver tissue, by g.l.c. or enzymic, 2D54
in rice or other plants, by g.l.c., comparison of extraction methods for, 5G34
in vegetables, by g.l.c., avoidance of interference by S compounds in, 2G30
Particle counting, in liquids, comparison of optical and electrical methods for, 1J100
photoelectric device for, with facility for simult. particle size analysis, 1J101*P*
Particle size analysis, by centrifugal photosedimentation, with use of laser light, 1J99
by Coulter principle, data conversion into digital form for computer acceptance in, 1J109*P*
by laser-light scattering, systems for, 1J102*P*, 1J107
by microscopy, with projection of particle images on television screen, 5J121
with use of interference instrument, 5J123
by sedimentation, effects of media conductivity in, 1J98
with use of ultra-microscope, 5J122
effect of electronic 'noise' in digital methods for, 5J117
factors affecting results from different techniques for, 5J116
filtration applications of, 6J78
in wet closed-circuit milling, 1J108
of aerosol particles trapped on fibre filter, by microscopy, 1J94
of aerosols, by light-scattering method, 5J120
by m.s., 1J95
electrical instrument for studies of sub-micron particles, 3A1*C*
with use of diffusion battery, 1J96
with use of Nuclepore filter sampler, 1J97
of atmospheric aerosols, with Coulter counter, 5A3*C*
of dusts, by electron microscopy, computerised technique for, 1J106
of ferrites, comparison of methods for, 6B207
of hop-extract emulsion, with Coulter counter, 1J110
of polymer latices, by ultra-centrifugation - light-scattering method, 5J119
of polysilicic acid sols, by light-scattering method - viscosim., 5J118
photoelectric device for, with facility for simult. particle counting, 1J101*P*
reviews, 1J92, 1J93, 5J115
sampling for, 6J76
use of stochastic methods in, 6J75
Particles, see also *Aerosols*; *Dust*
analysis, microscope - vidicon system for, 1J103*P*
characterisation, by automated scanning electron microscopy, 1J105*P*
by examination of electronic 'transparency', 1J104*P*
report of conference on, 5A7
Patulin, detmn., by t.l.c., 1F6
in apple butter, by h.p.l.c., 2F18
Peanut butter, detection of aflatoxins in, fluorescence reaction for, 5F14
Peas, detmn. of nucleic acids in, fluorim., 3G3
Pectin, detmn. in sugar juices, by spectroph. detmn. of uronic acids content, 6F8
of carboxylic acids and their degree of esterification in, by colloid titration, 6F9

Penamaldic acid, benzyl-, detmn. in degradation products of benzylpenicillin potassium, by h.p.l.c., 4E21
Penicillamine, detmn. in degradation products of benzylpenicillin potassium, by h.p.l.c., 4E21
Penicillic acid, detmn. in culture soln., by t.l.c. - u.v. spectroph., 3D3
Penicillin, benzathine, detmn. of H_2O in, coulom., 2E2
—, **benzyl-,** analysis of gaseous radiation-decomposition products of, by m.s., 6J64
detmn. in culture fluids, frustrated-multiple-internal-reflectance i.r. spectroph., 3E19
—, —, **potassium,** analysis of degradation products of, by h.p.l.c., 4E21
Penicillin amidase, see under *Enzymes, specific*
Penicillins, identn., as amides, 1E14
sepn. from other antibiotics and from each other, and detmn. of impurities in, by h.p.l.c., 2E16
Penicilloic acid, benzyl-, detmn. in degradation products of benzylpenicillin potassium, by h.p.l.c., 4E21
Penillic acid, benzyl-, detmn. in degradation products of benzylpenicillin potassium, by h.p.l.c., 4E21
Penilloic acid, benzyl-, detmn. in degradation products of benzylpenicillin potassium, by h.p.l.c., 4E21
Pentacyanoamminoferrate(II), detmn., potentiom., 3B145
Penta-1,4-dien-3-one, 1,5-bis-(5-nitro-2-furyl)-, amidinohydrazone, see *Nitrovin*
Pentaerythritol, detmn. in blood plasma, by h.p.l.c., 3D41
— **tetranitrate,** detmn. in air, by isotope dilution - m.s., 5H17
in pharmaceutical preparations, by kinetic - colorim. method, 2E34
Pentane, detmn. in expanded polystyrene, by g.l.c., 6C89
—, **2-methyl-,** sepn. from its isomers, by g.c., 3J35
Pentane-1,5-diamine, sepn. from other amines, by t.l.c. of dansyl deriv., 3D86
Pentane-2,4-dione, sepn. of chelates of, by t.l.c., 1C30
Pentanoic acid, 2-phenyl-, α-methylbenzylamine salt, sepn. of diastereoisomers of, by recrystallisation, 4C38
Pentanol, detmn. in presence of benzene and cyclohexanol, by partial extraction - refractom., 5C3
Pentanone, g.l.c. study of, 6C1
Pentathionate, detmn. in presence of other polythionates and $S_2O_3^{2-}$, by h.p.l.c. - fluorim., 2H35
Pentose 5-phosphate, detmn., colorim., prevention of interferences in orcinol method for, 3D54
Pentylenetetrazol, see *Leptazol*
Peonidin, sepn. from malvidin and petunidin, by h.p.l.c., 5F59
Pepper, identn. and detmn. of pungent principles in, by h.p.l.c., 3F16
Peppermint, detmn. of triazine herbicides in, by t.l.c., 1G13
Peppermint oils, analysis, and differentiation of samples from *Mentha piperita* and *M. arvensis*, by g.l.c., 3F18
differentiation of samples derived from different species, by g.l.c. or g.l.c. - m.s., 4C63
Pepsin, see under *Enzymes, specific*
Peptides, see also *Glycopeptides*; *Polypeptides*
analysis, by isotachophoresis, 2D111
of hydrolysates of hormone, by h.p.l.c., 6A1*C*
Peptides—*continued*
characterisation of low-mol.-wt., gel electroph of dansyl deriv., 1D72
detmn. in chrom. eluates, modified a.a.s. system for, 3D100
in preparative column effluents, automated fluorim., 2D116
of disulphide groups in, spectroph., 2D115
of S in *S*-benzyl-protected cysteine, bromatim., 5D74
sequence analysis, fluorescent Edman reagent for, 5D72
of multiple samples in nitrogen chamber, 2D114
paper chrom. - m.s., 2D112
—, **di-,** detmn., fluorim., 4D58
Peptide hydrazides, detmn. of hydrazide-N in, bromatim., 5D74
Perbromate, paper-chrom. study of reduction of, 6B185
Perchloric acid esters, bis-(1-butyl-2,6-dimethyl-pyridin-4-one), as analytical standard, 2A15
— —, **bis-(2,3-dimethyl-1-phenylpyrazolin-5-one),** as analytical standard, 2A15
Periodate, detmn., potentiom., 3B139
spectroph., 4C16
sepn. from I^-, IO_3^-, Te^{IV} and Te^{VI}, by t.l.c., 6B187
Perlolidine, identn. and detmn. in grasses, ion-exchange chrom. - paper chrom. (or t.l.c.) - densitom., 3G18
Perloline, identn. and detmn. in grasses, ion-exchange chrom. - paper chrom. (or t.l.c.) - densitom., 3G18
Perlolyrine, identn. and detmn. in grasses, ion-exchange chrom. - paper chrom. (or t.l.c.) - densitom., 3G18
Permanganate, detmn., amperom., 5B177
in presence of CrO_4^{2-} and VO_3^-, by reactive ion exchange - a.a.s., 5B25
Peroxides, organic, alkyl, spectra - structure correlations of, 2A1*C*
—, **benzoyl,** detmn. in industrial wastes, polarogr., 6H53
—, **bis(trifluoromethyl),** sepn. from CF_3OOSO_2F and $S_2O_6F_2$, by g.c., 1C21
—, **fluorosulphonyl trifluoromethyl,** sepn. from CF_3OOCF_3 and $S_2O_6F_2$, by g.c., 1C21
Peroxodicarbonic acid cyclohexyl ester, detmn. in industrial wastes, polarogr., 6H53
Peroxodiphosphate, detmn., iodim., 4B91
Peroxyacetyl nitrate, detmn. in air, pulsed-flow coulom., 1H8
Peroxydisulphate, detmn., molecular-emission-cavity spectrom., 2B114
Peroxydisulphuryl fluoride, sepn. from CF_3OOCF_3 and CF_3OOSO_2F, by g.c., 1C21
Peroxymonosulphate, detmn., molecular-emission-cavity spectrom., 2B114
Perphenazine, detmn. in blood plasma, with its sulphoxide metabolite, by g.l.c. of trimethylsilyl deriv., 2D35
Persedon, see *Pyrithyldione*
Perylene, detmn. in water, by g.l.c. - m.s., 3H39
sepn. from other hydrocarbons, by h.p.l.c., 2J10
Pesticides, see also *Herbicides*
air-borne g.c. analyser for study of drift of vapours of, 4J29
analysis, report of IUPAC Commission of development, improvement and standardisation of methods for, 5G24
chrom. studies of, 3G52*B*
detection of residues of, with use of multi-detector configurations, 2A4*C*
detmn., automated methods for, review, 3G30

icides, determination—*continued*
by g.l.c., detectors for use in, review, 3G33
by g.l.c. - m.s., review, 3G34
by h.p.l.c., review, 3G31
by t.l.c., review, 3G32
plasma chrom., 3G36
re-usable clean-up adsorbent for use in, 5G25
in crops or milk, by sweep co-distillation - g.l.c., 2G27
in environmental materials, sampling and extraction methods for, 3G28
in environmental materials or foods, review, 4G27
in foods, by g.l.c., extraction and clean-up methods for, 4G28
in foods of animal origin, by sweep co-distillation - g.l.c., 4F26
of fumigant gases, review, 3G47
of residues of, review of automated methods in, 2G26
of synergists for, review, 3G48
ctionary, 2G39*B*
traction from aq. soln., continuous, 5A4*C*
pn., by g.c., derivatisation for, review, 5J27
by h.p.l.c., 2J10
by t.l.c., 1J18
carbamate, detection in foods, by t.l.c., clean-up method for, 6F24
tmn., by g.l.c. of sulphonate deriv., 1G20
review, 3G45
quid-chrom. studies of, 2A4*C*
pn., by t.l.c., 4G36
pn. and detmn. in fruit or vegetable extracts, by t.l.c. - enzymic, 2G34
organochlorine, detmn., by g.c. - combustion - coulom., 2G28
by g.l.c., 4J31
comparison of methods for, 3G35
in cereals or milk, by t.l.c., clean-up procedures for, 3F21
in fatty foods, by h.p.l.c. - g.l.c., 2F41
in fish tissues, 2A4*C*
in plants, by vapour-phase purification - g.l.c., 4G30
in sediments, by t.l.c., 1H41
in soil, by g.l.c., photochem. induced artefact in, 5G31
in water, comparison of methods for, 5H37
l.c. study of, and of metabolites of, 4G29
organophosphorus, detmn., with their metabolites, review, 3G39
in biol. tissues, by g.l.c. or t.l.c., 1G19
in rice and other plants, by g.l.c., comparison of extraction methods for, 5G34
in vegetables, by g.l.c., avoidance of interference by S compounds in, 2G30
of anticholinesterase activity of, fluorim., 2G31
traction from water, 2A4*C*
.c. study of, and of metabolites of, 4G29
phenylurea, sepn., by t.l.c., 4G36
idine, detmn. in urine, with its basic metabolites, by g.l.c., 6D22
entn., by t.l.c., 3E4
-oxide, g.l.c. - m.s. study of, 6D22
ol, analysis of high-olefin-content, by m.s., 3C53
aracterisation of hydrocarbons of, by g.c., 3C51
tmn. of alkyl-lead in, by g.l.c., 2C54
of hydrocarbon-type distribution and H - C ratio in, by n.m.r., 6C61

Petrol, determination—*continued*
of Pb in, by a.a.s., 2C52, 2C53
possible olefin interferences in, 4C53
complexom., 4C53
sepn. and detmn. of heterocyclic and polycyclic compounds in, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
Petroleum, analysis, g.c. system for, 4J25
of high-boiling distillates, liquid chrom., 2A7*C*
of pollutant samples, i.r. spectroph., 2A4*C*
characterisation, by liquid-chrom. triterpane 'fingerprint', 3C40
of gasoline-range hydrocarbons in, by h.p.l.c., 3C49
of hydrocarbons of, by h.p.l.c., 3C48
detmn. in water, colorim. or dielectrom., with collection on polypropene 'wool', 3H41*P*
of aromatic hydrocarbons in medium oils, u.v. spectroph., 1C55
of Be in, by a.a.s., 6C64
of Cd in, by a.a.s., 3C43
of Cr, Ni and V in, spectrogr., 2C49
of extent of oxidation of films of, by t.l.c. - i.r. spectroph., 2C59
of Hg in, by a.a.s., 3C44
by n.a.a., errors due to use of polyethylene phials in, 2C51
of pitch volatiles of, in air-borne dust, by g.l.c. - u.v. spectroph., 6H20
in environmental materials, by g.c. - u.v. spectroph., 5A1*C*
of S in, by capture-γ-ray analysis, 6A3*C*
of trace metals in, by a.a.s., 3C42
of V in, by a.a.s., 3C45
fractionation, liquid chrom., 1C54
of aromatics of, liquid chrom., 6C62
gel-chrom. study of sulphonated fractions of, 2C64
identn. of sources of pollutant samples, by g.l.c. - g.s.c., 2A4*C*
by n.a.a., 3C41
i.r. spectroph., 2A1*C*
low-temp. i.r. spectroph., 3C52
of S-containing compounds in, preparation of thia-alkanes for, 2C55
role of trace metals in, 2C86*B*
sepn. of aromatic hydrocarbons from org. sulphides in high-boiling fractions of, liquid chrom., 1C56
sepn. and detmn. of heterocyclic and polycyclic compounds in, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
of organometallic compounds in shale, by h.p.l.c. - a.a.s., 3C29
Petroleum products, see also *Fuel oil*; *Gas oil*; *Kerosine*; *Lubricating oils*; *Paraffin wax*; *Petroleum wax*
detmn. in lye or water, fluorim., 5H39
in sulphur hexafluoride, B.S.I. method for, 3B120
in water, refractom., 4H36
of Be in, by a.a.s., 6C64
of dissolved gases in transformer oil, by g.c., 5J25
of elements in, by a.a.s., 1C57, 3J59
review of atomisation techniques in, 5J49
of hydraulic oil in cooling water, i.r. spectroph., 1H39
of Pb in, complexom., 4C53
of Hg in, by a.a.s., 3C44
of metal ions in aq. soln. of, flame photom., 5C41
of neutralisation values of transformer insulating oils, potentiom., 2C60

Petroleum products, determination—*continued*
of polycyclic hydrocarbons in white, liquid chrom. - fluorim. (or phosphorim.), 6C63
of thiols in, controlled-current coulom., 3C47
identn., low-temp. i.r. spectroph., 3C52
low-temp. studies of, 2A1*C*
Petroleum wax, detmn. of benzo[*a*]pyrene in, fluorim., 2C62
Petunidin, sepn. from malvidin and peonidin, by h.p.l.c., 5F59
pH, calculation of H^+ concn. at high ionic strength from potentiom. measurements of, 3J81
detmn., impedance stability of industrial electrodes for, 3A1*C*
increased reliability in industrial methods for, 3A1*C*
review, 2J132
diagram for detmn. of values of, for monofunctional acids and bases, 6J69
standardisation of detmn. of, 6J73*B*
Pharmaceutical analysis, 6C100*B*
applications of h.p.l.c. in, 2A1*C*
report of conference on, 4A2
Pharmaceutical containers, detmn. of O-permeability of, spectroph., 5E1
Pharmaceutical preparations, detection of sweeteners in, by t.l.c., 6E43
identn. of excipients in illicit tablets, i.r. spectroph., 4E7
interference by carbohydrates in U.S.P. test for readily carbonisable substances in, 4E5
radio-, quality tests of, 6E40
review, 6E39
use of organic elementary analysis for quality control of, 2E3
Phenacetin, detmn. in presence of aspirin, caffeine and paracetamol, by t.l.c., 4E27
of aspirin, caffeine, paracetamol and salicylamide, by h.p.l.c., 1E27
of aspirin and caffeine sodium benzoate, colorim., 2E31
of aspirin and codeine, spectroph., 4E30
Phenanthraquinone monothiosemicarbazone, as metallochromic indicator, 1A6
Phenanthrene, analysis of sulphonation products of, u.v. spectroph., 4C45
sepn. from other hydrocarbons, by h.p.l.c., 2J10
Phenanthrene derivatives, detmn. of S impurity in, by combustion - volum., 5C5
Phenazone, detmn., non-aq. coulom., 1C3
in analgesic tablets, by g.l.c., 6E4
—, **4-amino-,** detmn., volum., 1E1
oxidation of, with $KMnO_4$, 1E28
Phencyclidine, detmn. in biol. fluids, and identn. of metabolites of, by g.l.c. - m.s., 4D21
Phendimetrazine, detmn. in blood serum, by g.l.c., 1D32
Phenethyl alcohol, detmn. in beer, by g.l.c., 1F16
Phenethylamine, detmn. in foods, by g.l.c. of trifluoroacetyl deriv., 1F3
Phenetole, detmn., by g.l.c., 2C30
Phenformin, detmn. in blood, 4A2*C*
Phenindione, identn. and detmn. of 3-benzylidenephthalide in pharmaceutical preparations of, by t.l.c. - spectroph., 4E44
Phenmetrazine, characterisation of samples of, by g.l.c., 2E50
Phenobarbitone, detmn. in blood plasma or blood serum, by g.l.c. of *N*-butyl deriv., 3D34
in presence of other barbiturates, by t.l.c. - u.v. spectroph., 6D18
of papaverine, reserpine and theobromine, spectroph., 5E10
Phenobarbitone, determination in presence—*continued*
of phenytoin, by flash-heater alkylation g.l.c., 2E28
h.p.l.c. study of, 4E36
preparation of ^{14}C- and ^{2}H-labelled, 1D20
Phenol, detmn., indirect spectroph., 4E46
in industrial wastes, by g.l.c. of methyl deriv 6H54
continuous u.v. spectroph., 3A1*C*
in ointments, spectroph., 3E46
in phenolated calamine lotion, spectroph 2E54
in reaction products of 2-methoxyphenol an isobutene, by g.l.c., 4C32
in sewage effluent or water, by g.l.c. of tri methylsilyl deriv., 6H44
in tobacco-smoke condensate, by t.l.c. - g.l.c and g.l.c. - m.s., 5D40
methods for studying colour reactions of, 6C44
sepn. from methoxyphenol and orcinol, b h.p.l.c., 2J10
—, **4-amino-,** detmn. in paracetamol, fluorim. 2E33
—, **t-butyl-4-methoxy-,** detmn. in fats and fatty oils or in feeding-stuffs, by distillation - g.l.c. 4G11
—, **4-t-butyl-2-methoxy-,** detmn. in reaction pro ducts of 2-methoxyphenol and isobutene, b g.l.c., 4C32
—, **6-t-butyl-2-methoxy-,** detmn. in reaction pro ducts of 2-methoxyphenol and isobutene, b g.l.c., 4C32
—, **4-chloro-,** detmn., indirect spectroph., 4E46
—, **5-chloro-2-(2,4-dichlorophenoxy)-,** detmn. i cosmetics, partition chrom. - u.v. spectroph. 4C64
—, **4,6-di-t-butyl-2-methoxy-,** detmn. in reactio products of 2-methoxyphenol and isobutene by g.l.c., 4C32
—, **3-diethylamino-2-[3-(1-methyl-2-piperidyl)-2-pyridylazo]-,** as metallochromic indicator, 1B6
—, **4-ethyl-2-(2-thiazolylazo)-,** as metallochromic indicator, 3B14
—, **methoxy-,** sepn. from orcinol and phenol, b h.p.l.c., 2J10
—, **2-methoxy-,** analysis of products of alkylatio with isobutene of, by g.l.c., 4C32
—, **4-nitro-,** detmn. in blood, polarogr., 5D35
—, **nonyl-,** detmn. in waste water, by g.c., 1H47
—, **pentachloro-,** detection in wood, by t.l.c., 3C70
detmn., u.v. ratio spectroph., 2A1*C*
in faeces, by t.l.c., h.p.l.c. or g.l.c., 5D34
of chlorodibenzo-*p*-dioxins in, by g.l.c., comparison of methods for, 6G8
of octachlorodibenzo-1,4-dioxin in, by g.l.c., interference by 2,5-HCP in, 4G24
—, **3-pentadecyl-,** sepn. and identn. of ethylene oxide adducts of, by t.l.c. - n.m.r., 2C66
—, **2-phenyl-,** detection in wood, by t.l.c., 3C70
detmn. in citrus fruits, liquid chrom. - g.l.c., 3F20 spectroph., 1G15
Phenols, detection and detmn., by t.l.c., reagents for, 2C36
detmn., 6C43
potentiom., in 3-methyloxazolidine-2-one media, 2C31
with CNBr or ICN, 2C32
spectroph., 6C45
automated, 1C36
volum., 2C33
in dimethylformamide media, 5C30
in industrial wastes, sample preservation for, 3H45

enols, determination—*continued*
in water, by g.l.c., 3H40
by g.l.c. of pentafluorobenzyl deriv., 5H34
of olefinic composition of cashew-nut-shell, by t.l.c. - g.l.c. or methyl ethers, 4C91
of steam-volatile, in waste water, t.l.c. study of effect of presence of amines in, 1H48
paper-chrom. study of, 6D2
epn., by g.c., derivatisation for, review, 5J27
epn. and detmn., liquid chrom., fluorescence monitoring in, 4C30
l.c. studies of, 1C35, 2C34, 2C35
alkyl-, identn., by t.l.c. - i.r. spectroph., 3C62
nitro-, effect of r.h. on t.l.c. behaviour of, 5C27
enothiazine, detmn., by t.l.c. - u.v. spectroph., 1E29
3-amino-2-methyl-7-(methylamino)-, sepn. from toluidine blue O, by t.l.c., 4C66
10-(2-diethylaminoethyl)-, hydrochloride, as indicator for vanadimetry, 4A14
enothiazine derivatives, detmn., volum., with Na dioctyl sulphosuccinate, 1E32
.p.l.c. studies of, 1E30, 1E31
dentn., i.r. spectroph., 3E36
hosphorim. study of, 3E37
epn., by h.p.l.c., 3E35
ntermine, detmn. in blood, by g.l.c., isolation on macro-reticular resin for, 4D28
in presence of other mephentermine metabolites, with its *N*-hydroxy-deriv., by g.l.c., 6D29
nyl arsenoxide, see *Benzene, arsenoso-*
Phenylenediamine, analysis of hydrogenation products of, by g.l.c., 1C40
henylenediamine, analysis of hydrogenation products of, by g.l.c., 1C40
etmn., voltamm., with use of passivated hanging-mercury-drop electrode, 5C33
nylenediamine derivatives, detmn., potentiom., 3C82
epn., by t.l.c., 4C35
nylephrine, detmn., fluorim., 3E40
nytoin, detmn., by g.l.c. of pentafluorobenzoyl deriv., 6E23
in blood plasma or blood serum, inter-laboratory study of, 6D20
in presence of phenobarbitone, by flash-heater alkylation - g.l.c., 2E28
of metabolite of, in blood plasma, by g.l.c., 5D18
odium, t.l.c. detection and spectroph. detmn. of benzophenone in preparations of, 3E30
omones, identn., review of methods for, 3G51
pn., by h.p.l.c., 3J11
roglucinol, detection and detmn., by t.l.c., 2C36
codine, detmn., fluorim., 5E7
in pharmaceutical preparations, spectroph., 1E46
bol, 12-deoxy-, esters, identn. in *Euphorbia* spp., by t.l.c. - m.s., 1D48
gene, detmn. in air, pulsed-flow coulom., 1H8
met, detmn. in Ftalafos formulations, spectroph., 3G43
phatases, see under *Enzymes, specific*
phates, see also *Minerals, ores and rocks, phosphate*
alysis of mixtures of, by n.m.r., 2B96
ndensed, see *Polyphosphates*
tmn., by fluorim. titration, 2B93
by indirect a.a.s., 5B22
potentiom., enzyme electrode for, 3J84
indirect, with Pb^{2+}-sensitive electrode, 2B94

Phosphates, determination, potention—*continued*
ion-sensitive electrodes for, 2J136
spectroph., 2B95
flow-injection method for, 3J6
in blood, errors attributable to sample storage in, 1D2
in blood serum, correction for turbidity in, 1D1
without deproteinisation, photom., 4A1*C*
in blood serum or urine, automated spectroph., 5D11
in minerals, ores or rocks, volum., 5G10
in presence of detergents or protein, spectroph., 2D20
of F^-, potentiom., with Pb^{2+}-sensitive electrode, 6B147
of rare-earth metals, complexom., 3B72
in radioactive-waste supernate, laser - Raman spectrom., 4H37
in soil, automated spectroph., 1G6
in water, colorim., automated, 4H26
sample preservation for, 4H25
X-ray fluorescence spectrom., 3H27
of Cl^- in, potentiom., with ion-sensitive electrode, 5B139
of ^{32}P-labelled, in aq. soln., by liquid scintillation counting, losses due to pptn. in, 5H28
sepn. from ATP and 4-nitrophenyl phosphate, by ion-exchange t.l.c., 1D107
Phosphatidic acid, t.l.c. study of, 6D46
Phosphatidylcholines, analysis of long-chain acids of blood-plasma, by g.c., 6A1*C*
detmn. of oil content of commercial-grade, gravim., 1F22
of phosphatidylcholine - sphingomyelin ratio in amniotic fluid, paper chrom., 6D45
Phosphatidylserine, t.l.c. study of, 6D46
Phosphine, detmn. in air, reflectance spectroph., with use of mixed-indicator test-strip, 6H24
of ^3H-labelled, by radio - g.c., 6B19
—, **bis(pentafluorophenyl)phenyl-,** as reference compound for g.c. - m.s., 2A19
—, **tributyl-,** detmn. in air, spectroph., 5H14
—, **triphenyl-,** detmn., spectroph., 6C52
Phosphoglucomutase, see under *Enzymes, specific*
6-Phosphogluconate dehydrogenase, see under *Enzymes, specific*
Phospholipids, analysis of ethanolamine- and serine-containing, by h.p.l.c. of biphenyl-4-carbonyl deriv., 1D51
detmn., spectroph., 5D54
Phosphonic acid, chloromethyl-, derivatives, sepn. of esters of, by t.l.c., 5C22
—, **2-hydroxyethylidenedi(-,** detmn. in power-station cooling water, colorim., 4H32
—, **6-nitroacenaphthenyl-,** detmn., by t.l.c., 1C46
Phosphonium compounds, quaternary, tetraphenyl-, detmn., spectroph., 4C42
Phosphonium salts, field-desorption m.s. study of, 2C4, 3B8
5-Phosphoribosyl 1-pyrophosphate, detmn. in biol. tissues, radiom., 5D37
Phosphoric acid, detection in baking powder, by g.l.c. of trimethylsilyl deriv., 2F33
detmn. in oxidation products of phosphorus, photom., 5B137
of bis-(4-octylphenyl) and 4-octylphenyl phosphates in, spectroph., 5B138
of SiO_2 in, spectroph., B.S.I. method for, 5B136
explosion hazard from mixtures with surfactant of, 4A22

Phosphoric acid—*continued*
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
— **esters,** analysis of mixtures of mono- and di-alkyl, non-aq. potentiom., 2C27
— —, **bis(4-octylphenyl),** detmn. in phosphoric acid, spectroph., 5B138
— —, **2-bromo-1-(2,4-dichlorophenyl)vinyl diethyl,** see *Bromfenvinfos*
— —, **2-bromo-1-(2,4-dichlorophenyl)vinyl dimethyl,** see *Polfos*
— —, **dimethyl,** sepn. from other tetrachlorvinphos metabolites and detection, by t.l.c., 4G34
— —, **dimethyl 2,4,5-trichlorophenyl,** detmn. in eggs, by g.l.c., 3F22
— —, **4-nitrophenyl,** sepn. from ATP and PO_4^{3-}, by ion-exchange t.l.c., 1D107
— —, **4-octylphenyl,** detmn. in phosphoric acid, spectroph., 5B138
— —, **triethyl,** detmn., by g.l.c., 1C29
— —, **trimethyl,** detmn., by g.l.c., 1C29
Phosphorimetry, review, 4J49
use of external heavy-atom effect in room-temp., 2J119
Phosphorodithioic acid esters, *S*-benzoyl *OO*-diethyl, detection and identn., by t.l.c., 4G35
— —, ***S*-benzoyl *OO*-dimethyl,** detection and identn., by t.l.c., 4G35
— —, ***OO*-dimethyl *S*-4-nitrobenzoyl,** detection and identn., by t.l.c., 4G35
Phosphorofluoridic acid di-isopropyl ester, see *Dyflos*
Phosphorothioic acid triethyl ester, detmn., by g.l.c., 1C29
Phosphorothioic acid derivatives, *S*-esters, detmn., spectroph., 5C23
Phosphorous acid, detmn. in oxidation products of phosphorus, iodim., 5B137
— **esters, di-isopropyl,** detmn. in tri-isopropyl phosphite, i.r. spectroph., 6C35
— —, **tri-isopropyl,** detmn. of di-isopropyl phosphite and diethylaniline in, i.r. spectroph., 6C35
Phosphors, analysis of coatings of, by luminescence thermal degradation, 5B9
Phosphorus, detection in h.p.l.c. effluents, 6A1*C*
detmn., X-ray spectrom., characteristics of Ge (111) analyser crystals for use in, 2B92
in air-borne dust, by X-ray fluorescence analysis, absorption correction for, 5H2
in AMS alloy, photom., 1B18
in biol. materials, by a.a.s., 3D8
in industrial wastes, sample preservation for, 3H45
in iron, emission spectrom., 4B145
in iron alloys, volum., 2B141
in oil additives, by n.a.a., 3C55
spectroph., 6C68
in org. compounds, see under *Organic elementary analysis*
in plants, continuous-flow spectroph., 5G2
direct-reading emission spectrom., 2D5
spectrogr., 5D1
standards for, 2D4
in presence of Si, spectroph., 1G10
in silicates, spectroph., 6B121
in silicon, by n.a.a., 1B83
in silicon layers, by radioactivation analysis, 4B65
in silicophosphate glass, spectrogr., 1B177
in soil, causes for variations in results of, 1G7
colorim., solubilisation for, 3G10
in steel, by m.s., 4B144
comparison of methods for, 1B145
emission spectrom., 2B142, 4B145
Phosphorus, determination in steel—*continued*
X-ray emission spectrom., detection limit in, 5B195
evaluation methods in, 2B145
in water, by indirect a.a.s., 3H28
colorim., automated and semi-automated methods for, 6H37
spectroph., 3H26
in water containing particulate matter, comparison of digestion methods for, 5H27
in wheat, by n.a.a., 6G2
of Cu, Fe, H_3PO_4, H_3PO_3 and H_3PO_2 in oxidation products of red, 5B137
of different chemical forms of, in lime alumina slags, spectroph., 5B65
of distribution of, in silicon, by n.a.a., 6B115
of hydroxyproline-to-P ratio in bone tissue 4A1*C*
of ^{32}P, by Cerenkov counting, with use of anthranilic acid or quinine as wavelength shifter, 1J83
in presence of ^{14}C, by liquid scintillation counting, 4D9
Phosphorus, organic compounds of, sepn., by g.l.c., 1C29
Phosphorus tribromide, g.l.c. study of, 1B5
Phosphorus trichloride, g.l.c. study of, 1B5
identn. and detmn. of impurities in, i.r. spectroph., 5B135
Photographic materials, detmn. of SO_3^{2-} in baths, potentiom., 4B109
Phthalic acid, detmn., non-aq. conductim., 4C2
in oxidation products of *o*-xylene, by g.l.c., 1C32
in plasticiser-plant effluents, potentiom., 5H44
identn., by m.s. or plasma chrom., 2C42
— **anhydride,** detmn., volum., indicator for use in morpholine method for, 6C26
in alkyd resins, 4C86
— **esters,** detmn. in air, by g.l.c., 6H20
in open-ocean biota samples, by g.l.c., 6D35
sepn., by h.p.l.c., 2J10
sepn., identn. and detmn., by h.p.l.c., 2C83
— —, **bis-(2-ethylhexyl),** as contaminant in high-purity solvents, 2D1
— —, **butyl,** detmn. in plasticiser-plant effluents, potentiom., 5H44
— —, **diethyl,** detmn. in propellents, by h.p.l.c., 4C96
— —, **dimethyl,** detmn. in waste water, by g.c., 1H47
Phthalide, 3-benzylidene-, identn. and detmn. in phenindione tablets, by t.l.c. - spectroph., 4E44
—, **3-(3,5-dibromo-2,4-dihydroxyphenyl)-4,5-dimethoxy-,** as adsorption indicator, 3B132
—, **4,5,6,7-tetrachloro-3-(3,5-dibromo-2,4-dihydroxyphenyl)-3-methyl-,** detmn., volum., 1A7
Phthalocyanine derivatives, analysis of chlorinated metal, by g.c., 5D81
Phylloquinone, detmn., differential pulse polarogr., 1E21
in presence of menaphthone, polarogr., 2E26
of menaphthone or menaquinone, polarogr., 6E19
Physcion, sepn. from aloe emodin, chrysophanol and emodin, by h.p.l.c., 3E15
Physostigmine, detmn. in crude drugs, by TAS technique, 2E8
Phytate, see *Inositol hexaphosphate*
Phytomenadione, see *Phylloquinone*
Phyto-oestrogens, sepn. from endogenous oestrogens and from each other, gel chrom. - paper chrom., 4D48

ram, detection, fluorescence reaction for, 3G24
tmn., by g.l.c. of 2-chloroethyl ester, 5G26
c acid, detmn., non-aq. conductim., 4C2
pn. from tetryl and its other decomposition products, by h.p.l.c., 6C97
ents, detmn. of Cr, Cu and Mn in TiO_2-based, by a.a.s., 1B95
of Cr in chromate, by a.a.s., 5B162
fferentiation and classification, by i.r.-spectroph. examination of constituent minerals, 6C92
andard methods for analysis and testing of aluminium, 1C76
arpine, detmn., fluorim., 1E33, 5E7
in crude drugs, by TAS technique, 2E8
elic acid, 2,6-diamino-, detmn. in biol. materials, ion-exchange chrom. - spectroph., 1D71
in urine, de-salting procedure for use in, 1D70
zepam, detmn. in blood serum, brain tissue or urine, with its metabolites, by g.l.c. - m.s., 3D36
apples, detmn. of carbamate and urea herbicides in, by g.l.c. of methyl deriv., 5F45
nene, identn. in valerian oil, 5E21
colic acid, *N*-nitroso-, detmn., by g.l.c. of methyl deriv., 4F5
razine, detmn., volum., 1E1
in pharmaceutical preparations, spectroph., 3E43
ridine, *N*-nitroso-, identn. and detmn. in tobacco smoke, by g.l.c. and g.l.c. - m.s., 2D89
ridine derivatives, partition-chrom. studies of, 1C50, 1C51
rine, identn. and detmn. in pepper or pepper extracts, by h.p.l.c., 3F16
ronyl butoxide, detmn., review, 3G48
n, detmn. of volatiles of, in air-borne dust, by g.l.c. - u.v. spectroph., 6H20
in environmental materials, by g.c. - u.v. spectroph., 5A1*C*
pn. and detmn. of heterocyclic and polycyclic compounds in, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
kton, see under *Micro-organisms*
t-culture solutions, detmn. of P in Si-containing, spectroph., 1G10
ts, see also *Cereals*; *Fruit*; *Vegetables*; and names of specific plants
alysis, standards for use in, 2D4
thermoanalytical study of dry-ashing sample-preparation method for, 5A6*C*
of waxes of, by g.l.c., 5D50
say of α-amylase in, improved dyed amylose for use in, 2D160
tmn. of Sb and As in leaves of, by g.c. - emission spectrom., 3D19
of ATP in, by bio-luminescence method, 5D87
of Be in leaves of, by a.a.s., 6B231
by luminescence method, 1B38
of B in, spectroph., 3G8
of B and other elements in, spectrogr., 5D1
of Bromfenvinfos and Polfos in, by g.l.c., 6G10, 6G11
of carbaryl in, improved clean-up procedure for, 4G37
of $^{14}CO_2$ in respiration gases of, comparison of methods for, 2D16
of Cr in leaves of, by co-pptn. with $PbSO_4$ - reflectance spectroph., 2D22
of Co in, by a.a.s., 6G3
of 2,4-D in, by t.l.c. of methyl deriv. - g.l.c. of hydrogenation product, 1D35
of diazinon in, by micro sublimation - u.v. spectroph., 6D36

Plants, determination—*continued*
of elements in, by a.a.s., comparison of acids in wet digestion methods for, 4D3
by a.a.s. or a.e.s., 6J54
by n.a.a., 5G1
direct-reading emission spectrom., 2D5
wet-ashing in microwave oven for, 3D5
X-ray emission spectrom., 3D7
matrix-correction technique for, 4D1
of F^- in, comparison of sample-preparation methods for, 5G14
potentiom., with ion-sensitive electrode, 5G15
with use of steam-distillation from H_2SO_4, 2D23
of F in dried, by O-bomb combustion - potentiom., with ion-sensitive electrode, 5D12
of [^{14}C]glycollic acid in leaves of, by g.l.c., 1D44
of heavy metals in, by radioactivation analysis, 2A4*C*
of HCO_3^- in leaves of, manom., 1D12
of I in, semi-automated spectroph., 1G2
of Fe in, spectroph., 4G3
of ^{59}Fe in, by Cerenkov counting, 3D26
of Fe in Kjeldahl digests of, by automated a.a.s., 5G16
of Hg in seeds of, by a.a.s., 3G1
of Mo in, by n.a.a., 4D13
of nitrate-N in, potentiom., with ion-sensitive electrode, 3G9
of ^{15}N in amides and amino-acids of, by t.l.c. - emission spectrom., 2D105
of *N*-nitrosamines in herbs, by g.c., 6F5
of pesticides in, by sweep co-distillation - g.l.c., 2G27
sampling and extraction methods for, 3G28
of P in, continuous-flow spectroph., 5G2
of K in ash of, indirect amperom., 2F2
of K in leaves or fruit of, potentiom., with ion-sensitive electrode, 3G7
of Se in, by g.l.c., 2F5
of sol. carbohydrates and starch in, spectroph., 4D34
of S in, by O-flask combustion - turbidim., 4D12
of thiamine in, fluorim., 4D69
of thiofanox and its metabolites in, by g.l.c., 5G36
of triazine herbicides in medicinal, by t.l.c., 1G13
of Uzgen residues in, by t.l.c. - u.v. spectroph., 3G27
of V in, spectroph., 4D11
sepn. of anthocyanins of, liquid chrom., 2D131
of galactolipids and their deacylation products of, by g.l.c. of trimethylsilyl deriv. and t.l.c., 1D50

Plasminogen, fibrin-plate method for monitoring purification of, 1D84

Plasticisers, detmn. of phthalic acid esters in open-ocean biota samples, by g.l.c., 6D35
identn. and detmn. of carboxylic acids in ester, by g.l.c., preparation of methyl esters for, 3F49

Plastics, detection and detmn. of Cd and Pb in, by a.a.s., 1C8
detmn. of epoxyethane in, comparison of methods for, 4C81
of fat migration into, comparison of methods for, 3F39
of phthalate esters in, by h.p.l.c., 2C83

Plastics, determination—*continued*
of total migration from packaging materials, with use of ^{14}C-labelled fat simulant, 1F1
Platinum, detmn., by a.a.s., 2B158
with use of micro-probe - flame - adapter atomiser, 3B7
by catalytic - colorim. method, 3B163
spectrogr., 1B166
spectroph., 5B7
in biol. materials, by n.a.a., spontaneous sepn. procedure for, 5A5*C*
in biol. tissues, by a.a.s., 5D15
in copper, by n.a.a., 5B52
in copper-based standard reference materials, by n.a.a., 6B36
in gold, spectroph., 4B31
in industrial materials, by X-ray fluorescence analysis, 4B17
in minerals, ores or rocks, reference standard for, 5B209
spectrogr., 5B212
spectroph., 4B19
in presence of other elements, by a.a.s., 4B160
of Pd, spectroph., 3B165
in water, spectrogr., 1H24
sepn. from Bi, Cu and Hg, or from Fe, Mn and Pd, electroph., 1B167
from other elements, by solvent extraction, 5B210
from Pd and Ru, by t.l.c., 1B19
solvent extraction of, with esters of dithiocarbamic acids, 4B2
with heptan-4-one oxime, 2B154
with 4-(5-nonyl)pyridine, 6B228
with organophosphorus compounds - $SnBr_2$, 6B220
with quaternary ammonium nitrates, 6B1
sorption of, on sulphides from acid soln., 4B3
Platinum, reagents for, *NN'*-didodecyldithiooxamide, 4B19
furylpentadienal thiosemicarbazone, 3B165
Rhodamine B ethyl ester, 5B7
$SnCl_2$, 4B31
Platinum complex, with thiourea, detmn. of S in, volum., 2B113
Platinum-group metals, detmn., by a.a.s., in non-aq. media, 4B159, 5B211
Plutonium, comparison of ^{242}Pu and ^{236}Pu for use as analytical tracer, 3B86
detmn., by electro-deposition - α-counting, 2D12
calorim., 6A3*C*
complexom., 3B87
volum., 6B103
in biol. materials, by electro-deposition, 3D15
in biol. materials, soil or water, review, and methods developed for, 6H35
in biol. tissues, by fission-track counting, 1A1*C*
in chemical-processing plant waste, 2A7*C*
in environmental materials, radiochem., review, 2A7*C*
in nuclear-reactor fuels, 6B239*B*
in sea-water, by electro-deposition, 4H23
in small animal carcases, 2A7
of Ga in, spectrogr., 6B105
of impurities in, by a.a.s., apparatus for, 2B67
of metabolised, in faeces or urine, 1A1*C*
of ^{17}O and ^{18}O in ^{238}Pu materials, γ-spectrom., 2A7*C*, 2B70
of ^{239}Pu in bovine tissues, 1A1*C*
of Th in, X-ray spectrom., 3B88
γ-ray spectra for light elements in substances containing, 5B111
isotopic analysis, γ-spectrom., 6A3*C*
oxidation of Pu^{III} by V^{V}, 6B104
Plutonium—*continued*
sepn. from other elements, by ion exchange in HCl - HBr media, 1A1*C*
by selective sorption, 2B69
Plutonium nitrate, detmn. of U in, spectroph. 5B112
Plutonium oxides, detmn. of U in, spectroph., 5B11
Polarography, automated, flow-through cells and de-aeration unit for, 5J99
comparison with a.a.s. for heavy-metal detmn. 5A3*C*
flow-through cell for continuous measurement in, 2B133
mechanical drop-detacher for dropping-mercury electrode for, 5J101
review of square-wave and related techniques 1J75
Polfos, detmn. in plants or soil, by g.l.c., 6G11
sepn. from impurities and identn., by t.l.c., and detmn., by g.l.c. or i.r. spectroph., 6G10
Polonium, sepn. from other elements, by g.s.c. 3B83
Polyacrylonitrile, detmn. of anionic groups in fibres of, evaluation of methods for, 2C72
Poly(adenosine diphosphate ribose), see under *Enzymes, specific*
Polyamides, see also *Nylon*
analysis of utensils made of, German official methods for, 4F11
detmn. of acetic and propionic acids in, by g.c. 4C75
of dodecalactam in extracts of 12, potentiom. 3C83
of primary and secondary amino-groups in spectroph., 2C73
of terminal amino-groups in, potentiom., 3C82
Polyamines, detmn. in blood, blood plasma or urine, liquid chrom., 2A1*C*
in urine, by g.l.c. of pentafluorobenzoyl deriv., 6D54
paper-electroph. study of, in strong-acid media, 6D62
sepn. and detmn., by t.l.c. - spectroph., 6C28
Polyesters, analysis, applications of gel-chrom. methods in, review, 4C87
comparison of methods for detmn. of oligomers in, 6C86
Curie-point pyrolysis - g.c. study of, 4C77
detmn. in blends with wool fibres, i.r. spectroph., 5C52
of 2,2-bis(hydroxymethyl)butanol, diethylene glycol and glycerol in hydrolysates of, by g.l.c., 3C74
of dye carriers in fibre or fabric of, 2A1*C*
identn. and detmn. of carboxylic acids in resins of, by g.l.c., preparation of methyl esters for 3F49
methods for characterisation of surface grafts or films of, 4C82
Poly(ethanediol stearate), detmn. on finished fibres spectroph., 1C68
Polyethylene, analysis of combustion products of by g.c., sampling system for, 4C76
detmn. of Cu and Pb in, by a.a.s., 4D4
of methyl-group content and density of, i.r. spectroph., 2C75
methods for characterisation of surface grafts or films of, 4C82
Poly(ethylene terephthalate), analysis of mixtures of diols and esters obtained in production of, by g.l.c. of trimethylsilyl deriv., 1C74
Polymers, see also *Copolymers*; *Plastics*; *Resins, synthetic*

ymers—*continued*
nalysis, by pyrolysis - g.c., 4C92
Fourier-transform spectrom., 2A1*C*
gel chrom., recent advances in, 2A1*C*
of gases from combustion and pyrolysis of, by g.c., cold-trap sampling system for, 4C76
of products of oxidation of, by g.c. - m.s., system for, 5C53
of vinyl, applications of gel-chrom. methods in, review, 4C87
haracterisation, by g.c., 2A1*C*
by pyrolysis - g.l.c., with use of computer and external standard, 1C80
by thermal-evolution techniques, 2A1*C*
of vinyl, by thermofractography - t.l.c., 2C74
etection and detmn. of free monomers in aq. emulsions of, by g.c., 3C75
etmn. in industrial materials, gel chrom., 1C82
of functional groups in, 2A1*C*
of HCN in products of pyrolysis of N-containing, u.v. spectroph., 5C54
of Ru in organometallic, X-ray emission spectrom., 6C8
of H_2O in, 2A1*C*
r. studies of irradiated thin films of, with use of NaCl as window material, 2C78
nicro-structure analysis, by ^{13}C Fourier-transform n.m.r., 2A1*C*
article size analysis of latices of, by ultracentrifugation - light-scattering method, 5J119
y(methyl methacrylate), Curie-point pyrolysis - g.c. study of, 4C77
y(methylsiloxanes), detmn. of Cr in, spectrogr., 6C91
ymyxin B, detmn., fluorim., 3D33
in fermentation media, spectroph., 4E24
yols, detmn. in alkyd resins, 4C86
epn., by t.l.c. or paper chrom., 3C11
yoxyalkene glycols, analysis, and analysis of methyl ethers of, applications of gel-chrom. methods in, review, 4C87
yoxyethylene glycol, detmn. in γ-globulin soln., spectroph., 1D83
y(pent-1-ene), analysis of products of oxidation of, by g.c. - m.s., 5C53
ypeptides, detmn. in fish tissues, turbidim., 3F11
of antibiotics, by h.p.l.c., 6A1*C*
y(phenyl ethers), sepn. of isomeric, by g.l.c., 1C34
yphosphates, analytical chemistry of, 3B175*B*
ypropene, detmn. in fibre blends, by hot-extraction process, 6C84
of antioxidants in, gel chrom. and liquid adsorption chrom., 5C59
of Ti in, photom., 1B92
nethods for characterisation of surface grafts on films of, 4C82
ysaccharides, detmn. in protein-rich foods, by pptn., 1F14
of degree of polymerisation of, by g.l.c., 1C24
ystyrene, detection and detmn. of fire retardants in, scheme for, 4C80
etmn. of blowing agent and styrene residues in expanded, by g.l.c., 6C89
ythiazide, detmn. in pharmaceutical preparations, by h.p.l.c., 4E43
yurethans, Curie-point pyrolysis - g.c. study of foams of, 4C77
etmn. of OH-groups in polyhydric compounds for production of, comparison of methods for, 4C79
of residual isocyanato-groups and allophanates in, potentiom., 1C75

Polyurethans—*continued*
sepn. and detmn. of isocyanate components of, by pyrolysis - g.l.c., 6C87
Poly(vinyl chloride), detmn. of vinyl chloride monomer in, by g.l.c., 3C80, 5C55
standards for, 6C85
Porphobilinogen synthase, see under *Enzymes, specific*
Potassium, detection, by t.l.c., 2B23
detmn., by a.a.s., with laser source, 6B25
by a.e.s., with use of heated-graphite atomiser, 2B10
potentiom., 3B28
ion-sensitive electrode for, 3J82
volum., 5B33
X-ray emission spectrom., with proton excitation, 1B6
in alkali-metal or barium halides, by m.s., 3B29
in biol. materials, by a.a.s., 3D8
in blood, errors attributable to sample storage in, 1D2
in blood of oceanic fish, flame emission spectroph., 4D8
in blood serum, by a.a.s., 2D6
ion-exchange chrom., 5J17
potentiom., with ion-sensitive electrode, reference standards for, 3D12
in copper ores, by n.a.a., 5B43
in erythrocytes, comparison of methods for, 4A1*C*
in feldspar, emission spectrom., with ion-beam excitation, 4J44
in fertilisers, automated flame photom., 4G4
in foods, indirect amperom., 2F2
in fruit juices, ion-exchange chrom., 5J17
in hair, by a.a.s., 6D4
in hornblende, X-ray emission spectrom., 3J57
in lamellar insertion compounds with graphite, by a.a.s., 2B74
in lysimeter water from soil, potentiom., with ion-sensitive electrode, 3G7
in minerals, ores or rocks, by n.a.a., 4B22
in org. solvents, flame photom., 1C4
in petroleum or petroleum products, flame emission spectroph., 6C65
in plants, direct-reading emission spectrom., 2D5
indirect amperom., 2F2
standards for, 2D4
in presence of isocyanates, polarogr., 6C88
in refractory materials, flame spectrom., 1B178
in sediments, by a.a.s., 6H26
in silicates, with electron micro-probe, 4B66
X-ray emission spectrom., 4B67
in soil, by a.a.s., comparison of extractants for, 3G6
in steel, by electrolysis - flame photom., 2B140
in urine, by n.a.a., 4D6
ion-exchange chrom., 5J17
in water, 6H29
by n.a.a., 2H16
sepn. from Ba and Sr or from Cs, paper chrom., 3B3
Potassium bromide, detmn. of impurities in, by m.s., 3B29
field-desorption m.s. study of, 3B8
Potassium chloride, detmn. in aq. soln. containing other chlorides, by capillary-tube sepn. in electric field, 6B3
in Elkinton soln., volum., 3E49
of Co in, by kinetic - thermom. method, 5B203
of impurities in, by m.s., 3B29
field-desorption m.s. study of, 3B8

Potassium dichromate, drying and weighing of, 5A11
Potassium fluoride, field-desorption m.s. study of, 3B8
Potassium hydroxide, detmn. of Ni in, by chemiluminescence method, 5B30
of oxidised iron in, spectroph., 6B26
Potassium iodide, detmn., by thermom. titration, 4C25
of impurities in, by m.s., 3B29
field-desorption m.s. study of, 3B8
Potassium nitrate, measurement of refractive index of fused, 1J62
Potassium ores, analysis, in non-aq. media, 5G8
Potassium salts, detmn. in aq. soln., by β-ray backscattering, 5B18
Potatoes, detection and detmn. of propoxur in, by t.l.c. - enzymic, and colorim., 3G44
detmn. of As in, by a.a.s., 3F5
of indol-3-yl-acetic, -propionic and -butyric acids in, by t.l.c., 3G21
of maleic hydrazide in, spectroph., collaborative study of, 5G37
of organochlorine pesticides in, by vapour-phase purification - g.l.c., 4G30
of thiofanox and its metabolites in, by g.l.c., 5G36
sepn. of glycoalkaloids of, by g.l.c. of permethyl deriv., 1G3
Potentiometry, 3J89*B*
automatic instrument for recording redox potentials in flowing systems, 2F23
linear-response reagents for, 4A16
Poultry tissues, characterisation of polycyclic hydrocarbons in, by g.l.c., 2F16
detmn. of extraneous H_2O in, 6F14
of nifursol in frozen turkey, by hydrolysis - g.l.c., 2F40
Praseodymium, detmn., volum., 6B87
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in rare-earth concentrates, by n.a.a., 6B85
in steel, emission spectrom., 1B144
X-ray emission spectrom., 3B151
sepn. from Eu or Tm, by ion exchange, 4J13
from Sm, paper chrom., 3B3
Praseodymium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Prednisolone, detmn., spectroph., 3E26
in pharmaceutical preparations, spectroph., 4E42
protein-binding study of, 6D51
Prednylidene, detmn., spectroph., 3E26
Pregna-1,4-diene-3,20-dione, analysis of enzymic conversion products of, by h.p.l.c., 4D46
Pregnanediol, detmn. in urine, by g.l.c., 3D76
Pregnanedione, sepn. from progesterone, liquid chrom., 6D51
Pregn-5-en-20-one, 3β-hydroxy-, sepn. from progesterone, liquid chrom., 6D51
Pregn-4-ene-3,20-dione, 17α-hydroxy-, sepn. from progesterone, liquid chrom., 6D51
Primidone, detection, identn. and detmn. in biol. materials, with its metabolites, by radiotracer and g.c. - m.s., and preparation of ^{14}C- and ^{2}H-labelled, 1D20
detmn. in blood plasma or blood serum, interlaboratory study of, 6D20
Primula root, sepn., identn. and detmn. of saponins in, by t.l.c. - fluorim., 3E13
Procainamide, detmn. in pharmaceutical preparations, fluorim., 2E36
Procaine, detection, optimum concn. of Dragendorff reagent for, 3E11
detmn., by two-phase titration, potentiom. or spectroph., 5E38
spectroph., 3E39
Prochlorperazine, h.p.l.c. study of, 4E36
Progesterone, detmn. in blood plasma, by t.l.c. - g.l.c., 3D83
purification, liquid chrom., 6D51
—, **17-hydroxy-,** see *Pregn-4-ene-3,20-dione, 17α-hydroxy-*
Proline, detmn., colorim., 3C22
—, **hydroxy-,** detmn. of ^{14}C-labelled, by liquid scintillation counting, 1D68
of hydroxyproline-to-P ratio in bone tissue, 4A1*C*
—, ***N*-nitroso-,** detmn., by g.l.c. of methyl deriv., 4F5
differential pulse polarogr., 4F7
Proline hydroxylase, see under *Enzymes, specific*
Promethazine, detmn. in analgesic tablets, by g.l.c., 6E4
Promethium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Prometryne, detmn. in medicinal plants, by t.l.c., 1G13
Propanal, thio-, *S*-oxide, detmn. in onions, by t.l.c. - spectroph., 3F14
u.v. spectroph., 5F36
Propane, B.S.I. specifications for commercial, 1C58
identn. in pyrolysis products of methane, by g.c., 6C13
sepn. from ethylene, by g.s.c., effect of sample size in, 2C12
sepn. and detmn. of hexanes in pyrolysis products of, by g.l.c., 4C7
—, **1,2-bis-(3,5-dioxopiperazinyl)-,** detmn. in blood plasma, by g.l.c. - m.s., 1D29
—, **1,2-dibromo-,** detmn. in water, 4H30
—, **2-methyl-2-nitroso-1-phenyl-,** detmn. in presence of other mephentermine metabolites, by g.l.c., 6D30
—, **nitro-,** g.l.c. study of, 6C1
—, **1,1,1-tris(hydroxymethyl)-,** see *Butanol, 2,2-bis-(hydroxymethyl)-*
Propane derivatives, diphenyl, identn. and detmn. in *Myristica fragrans*, by g.l.c. - m.s. of trimethylsilyl, triethylsilyl or tripropylsilyl deriv., 3E17
Propane-1,3-diamine, sepn. from other amines, by t.l.c. of dansyl deriv., 3D86
Propane-1,2-diol, detmn. of diethylene glycol in, spectroph., 3C10
sepn. from other alcohols, by h.p.l.c., 2C14
Propan-1-ol, detmn. in beer, by g.l.c. of head-space vapours, 3F34
identn. and detmn. in isobutyl alcohol, by g.l.c., 4C14
Propan-2-ol, detection and detmn. in oilseed meals and flours, by g.l.c., 4G18
detmn., conductim., 5C4
sepn., identn. and detmn. of impurities in, by g.l.c., 4C14
—, **1-t-butylamino-3-[4-(3-cyclohexylureido)phenoxy]-,** see *Talinolol*
—, **(−)-1-t-butylamino-3-(4-morpholino-1,2,5-thiadiazol-3-yloxy)-,** see *Timolol*
—, **3-(4-hydroxy-1-naphthyloxy)-1-isopropyl)-amino-,** detmn. in blood plasma, by g.l.c. - m.s. of trifluoroacetyl deriv., 6D28
Propantheline, h.p.l.c. study of, 4E36
Propellents, analysis of nitroglycerin-containing, by h.p.l.c., 4C96

)ene, detmn. in biol. materials or water, by g.c., pre-concn. method for, 5H33
entn. in pyrolysis products of methane, by g.c., 6C13
entn. and detmn. in vinyl chloride, by g.l.c., 1C70
pn. from butane, by g.s.c., effect of sample size in, 2C12
from other alkenes, by g.l.c., 6C16
)ionamide, sepn. from related compounds, by g.c., 3C24
***NN*-dimethyl-,** sepn. from related compounds, by g.c., 3C24
***N*-methyl-,** sepn. from related compounds, by g.c., 3C24
)ionate, β-guanidino-, detmn., and detmn. of phosphorylated, in biol. tissues, colorim., 4D53
)ionic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
in Polyamide 6, by g.c., 4C75
2-(3-benzoylphenyl)-, see *Ketoprofen*
2-hydroxy-2-methyl-, methyl ester, detmn. in methyl methacrylate, by g.l.c., 5C58
3-indol-3-yl-, detmn. in potatoes, by t.l.c., 3G21
3-mercapto-, detmn., potentiom., 6C32
2-phenyl-, α-methylbenzylamine salt, sepn. of diastereoisomers of, by recrystallisation, 4C38
2-[4-(2-thenoyl)phenyl]-, see *Suprofen*
poxur, detection, by t.l.c. - enzymic, and detmn. in potatoes, colorim., 3G44
in foods, by t.l.c., clean-up methods for, 6C24
etection and detmn. in fruit or vegetables, by t.l.c. and g.l.c., 4G37
etmn., photom., 1G21
in presence of other carbamate pesticides, by t.l.c. - enzymic, 2G34
lentn. and detmn. in presence of other pesticides, by t.l.c., 2G35
pranolol, detmn. in blood plasma, with its 4-hydroxy-metabolite, by g.l.c. - m.s. of tri-fluoroacetyl deriv., 6D28
pylamine, detmn. in presence of amino-acids and NH_3, spectroph., 2D85
of H_2O in, conductim., 4C3
3-(1-benzylcycloheptyl)oxy-*NN*-dimethyl-, see *Bencyclane*
pyne, detmn., by g.l.c., 2C56
lentn. and detmn. in vinyl chloride, by g.l.c., 1C70
staglandins, analysis, by h.p.l.c., review, 3D70
etection of E and F, colour reaction for, 2D70
etmn. of A_2, in blood, by h.p.l.c. - g.l.c. of trimethylsilyl deriv. of methyl ester - m.s., 2D71
of E and F, fluorim., 1D46
of E_2 and $F_{2\alpha}$, in brain tissue, by g.l.c. of trimethylsilyl deriv. of methyl esters - m.s., 2D72
of E and 19-hydroxy-E, in seminal plasma, by g.l.c., 4D40
of $F_{2\alpha}$, in cerebrospinal fluid, by g.l.c. of trimethylsilyl deriv. of methyl ester - m.s., 2D73
lentn., by t.l.c. - colorim., 4D39
epn., by h.p.l.c. of 4-nitrophenacyl esters, 2D68
paper chrom., 5D42
of E_2 and $F_{2\alpha}$, by t.l.c., 2D69
epn. and detmn. of A_2, B_2, E_2 and $F_{2\alpha}$, by t.l.c. - remission spectroph., 1D45
of E, by t.l.c. - radiom., 5D43
epn. and identn. of E_1, E_2, $F_{1\alpha}$ and $F_{2\alpha}$, paper chrom., 3D69
state tissue, analysis of steroids of, by t.l.c. - g.c. of trimethylsilyl deriv. - m.s., 4D47
Protactinium, detmn. of ^{231}Pa and its decay products in urine, 1A1*C*
extraction from molten nitrate media, with copper(II) bis-(2-ethylhexyl) phosphate, 3B17
sepn. from other elements, by solvent extraction, 6B94
from Th, by selective sorption, 5B104
Proteases, see under *Enzymes, specific*
Protein kinase, see under *Enzymes, specific*
Protein-nitrogen, detmn., automated, 5G13
comparison of methods for, 3G2
Proteins, see also *Glycoproteins*; *Lipoproteins*
analysis, acid-hydrolysis procedure for, 5F3
detmn., automated spectroph., 2F17, 4D59
fluorim., membrane-filter technique for, 1D74
gel electroph. - spectroph., 2D119
in barley, malt or wort, comparison of methods for, 5F50
in blood, errors attributable to sample storage in, 1D2
in bread or biscuits, volum., 6F12
in brewing materials, review of automated and semi-automated methods for, 4F28
in cereals or oilseeds, near-i.r. reflectance spectroph., 3G5
in chrom. eluates, modified a.a.s. system for, 3D100
in milk, by dye-binding method, comparison of dye formulations for, 2F29
collaborative study of Pro-Milk method for, 2F28
in preparative column effluents, automated fluorim., 2D116
in urine, comparison of methods for, and normal values, 4A1*C*
comparison of spectroph. methods for, and immunoelectroph., 3D99
of acyl - acyl carrier, in lipid mixtures, sepn. scheme for, 5D53
of amino-groups in, spectroph., 2A1*C*
of ^{14}C-labelled, gel electroph. - autoradiogr., with use of image intensifier, 1D78
of labile sulphide in iron - sulphur, colorim., 5D76
of mercapto-groups in, amperom., 5D75
fluorim., 2D128
of mol. wt. of, gel electroph., avoidance of chymotrypsin and trypsin interference in, 1D101
identn. and detmn. of denatured, by computer comparison of amino-acid patterns, 4F19
prevention of adsorption of, on controlled-pore glass, 3D102
sepn., affinity chrom., 4D60
by counter-current distribution (or gel chrom.) of polysulphonated deriv., 2D127
by isoelectric focusing, 6A2*C*
use of ^2H_2O in preparation of density gradients for, 1D75
by isotachophoresis, 6A2*C*
by membrane ultra-filtration, 3D90
controlled-pore-glass chrom. of Na dodecyl sulphate complexes, 4D61
electroph., effect of presence of various amounts of Na dodecyl sulphate in, 5D78
gel electroph., effect of reducing agents in, 2D118
recovery of sample components in, 3D101
two-dimensional technique for, 5D79
from Na dodecyl sulphate, by electro-dialysis, 2D121
of amino-acids in hydrolysates of, electroph. - t.l.c., 1D64

Proteins, separation—*continued*
of denatured, from dodecyl sulphate and buffer ions, by gel filtration, 2D120
of myelin, gel electroph., precaution necessary in, 4D62
of ribosomal, gel electroph., sample preparation for, 2D117
of urinary, gel electroph., 1D76
sepn. and detmn., gel electroph., with use of whole-gel scanner, 1D77
sequence analysis, automated, with use of [^{14}C]isothiocyanatobenzene, 2D113
conversion of thiazolinone deriv. of amino-acids to thiohydantoins for, 1D80
fluorescent Edman reagent for, 5D72
removal of contaminating Quadrol in, 1D81
spectroph. data for, 5D77
tables of amino-acid composition of, as residues per mol., 1D79
—, **blood-plasma,** isolation of *N*-methylated basic amino-acids from hydrolysates of, ion-exchange chrom., 2D101
—, **blood-serum,** detmn., refractom., interference from serum separators in, 1D73
from dodecyl sulphate and buffer ions, by gel filtration, 2D120
Pumps, detmn. of Ar leaks through seals of liquid-sodium, by n.a.a., 5A5*C*
liquid-N, 2J1
Purine, 6-mercapto-, see *Mercaptopurine*
Putrescine, detmn., potentiom., enzyme electrode for, 5J97
in presence of spermidine and spermine, by h.p.l.c., 3D87
in urine, by t.l.c. of dansyl deriv., 3D86
Pyran, perfluoro-2-isopentyl-, detmn. in biol. fluids or tissues, by g.l.c., 2D49
Pyran-4-one, 3-hydroxy-2-ethyl-, detection and detmn. in beverages or foods, by t.l.c., 1F4
—, **3-hydroxy-2-methyl-,** detection and detmn. in beverages or foods, by t.l.c., 1F4
Pyrazole, 4-methyl-, detmn. in blood serum, by g.l.c. - m.s., 1D34
Pyrazole derivatives, nitro-, basicity of, and detmn., spectroph., 5C39
2-Pyrazoline, 1,3-diphenyl-, derivatives, sepn., by t.l.c., 5C40
Pyrazolin-3,5-dione, 4-(4,4-dimethyl-3-oxopentyl)-1,2-diphenyl-, see *Trimetazon*
Pyrene, detmn. in water, by g.l.c. - m.s., 3H39
sepn. from other hydrocarbons, by h.p.l.c., 2J10
Pyridine, detmn., spectroph., 1C49
of H_2O in, conductim., 4C3
g.l.c. study of, 6C1
paper-chrom. study of, in formamide - formic acid media, 6C59
—, **4-amino-,** detmn. in sunflower seeds or plants, by g.l.c., 2G32
—, **3-(1-nitroso-2-pyrrolidinyl)-,** see *Nornicotine, N′-nitroso-*
Pyridine derivatives, detmn. in air, photom., 4H17
of *N*-oxides of, differential pulse polarogr., 6C10
review of g.l.c. studies of, 2C46
steric effects in liquid-chrom. sepn. of, 1C48
Pyridine-2,3-dicarboxylic acid, detmn., polarogr., 3C38
Pyridine-3,5-dicarboxylic acid, 1,4-dihydro-2,6-dimethyl-, diethyl ester, detection, colour reaction for, 4G12
—, **2,6-dimethyl-, diethyl ester,** detection, colour reaction for, 4G12
Pyridine-2,4-(1*H*,3*H*)-dione, 3,3-diethyl-, see *Pyrithyldione*
Pyridinium bromide, dodecyl-, detmn., amperom., 5C47
Pyridinium chloride, dodecyl-, detmn., enzymic - spectroph., 2C65
Pyrido[2,3-*d*]pyrimidine, 3-(4-chlorophenyl)-2-methyl-4-oxo-, sepn. and identn. of urinary metabolites and decomposition products of, 1D19
Pyridoxal, detmn. in presence of related compounds, semi-automated ion-exchange chrom., 3D117
sepn. from pyridoxol and pyridoxamine, ion-exchange chrom., 6E16
Pyridoxamine, detmn. in presence of related compounds, semi-automated ion-exchange chrom., 3D117
sepn. from pyridoxal and pyridoxol, ion-exchange chrom., 6E16
Pyridoxine, detection in multivitamin preparations, by t.l.c., and spot test for, 6E17
detmn. in foods, fluorim., 5F71
in presence of other vitamin B compounds, by t.l.c. - densitom., 2E23
of related compounds, semi-automated ion-exchange chrom., 3D117
— **hydrochloride,** sepn. from other vitamin B compounds, by t.l.c., 2E22
Pyridoxine kinase, see under *Enzymes, specific*
Pyridoxol, sepn. from pyridoxal and pyridoxamine, ion-exchange chrom., 6E16
Pyrimethamine, solvent extraction of, with toluene, 6D15
Pyrimidine, 4-amino-6-hydroxy-2-mercapto-, as analytical reagent, 6A10
Pyrimidine deoxyribonucleoside kinase, see under *Enzymes, specific*
Pyrimidine derivatives, mercapto-, detmn., volum., 2C47
Pyrithyldione, identn., colour and fluorescence reactions for, 3E29
Pyrochlore, detmn. of Nb in, spectroph., 3B116
Pyrogallol, detection, colour reaction for, 6C46
detection and detmn., by t.l.c., 2C36
Pyrophosphate, detmn., spectroph., manual and automated methods for, 4D10
in phosphate mixtures, by n.m.r., 2B96
gel chrom. - a.a.s., 4B90
Pyrophosphoric acid, detection in baking powder, by g.l.c. of trimethylsilyl deriv., 2F33
Pyrrolidine, *N*-nitroso-, detmn. in cured meats and related products, by g.l.c. - m.s., 2F15
Pyrrolidine-1-carbodithioic acid, sepn. and detmn. of Co and Cu salts of, by t.l.c. - i.r. spectroph., 4C49
Pyruvate, detmn. in milk, automated enzymic - photom., 5F30
Pyruvate kinase, see under *Enzymes, specific*
Pyruvic acid, sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
—, **phenyl-,** decarboxylation during extraction from urine of, 6D42

Q

Quartz, detmn. in clay, by d.t.a., 5A6*C*
of α-, in air-borne dust, i.r. spectroph. or X-ray diffractom., 1H9
of W in inclusions in, oscillopolarogr., 5B171
Quillaia bark, identn. and detmn. of saponins in, by t.l.c. - fluorim., 3E13
Quinacrine, see *Mepacrine*
Quinazolin-4-one, 7-bromo-6-chloro-3-[(3-hydroxy-2-piperidyl)acetonyl]-3*H*-, hydrobromide, see *Cebegine*

ıic acid, identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
ıidine, detmn. in blood serum, by t.l.c. - fluorim., 4D15
ıine, comparison of reagents for pptn. of, 5E8
ıentn., by t.l.c., 3E4
ıisulphate, detmn. of purity of, non-aq. volum., 5E14
ıol, detection and detmn., by t.l.c., 2C36
ətmn., cerim., indicator for, 4A13
indirect spectroph., 4E46
vanadim., indicator for, 4A14
in bearberry leaves, paper chrom. - spectroph., 3D59
in presence of other phenols, spectroph., 4C31
ɪandardisation of soln. of, 1C38
ıoline, paper-chrom. study of, in formamide - formic acid media, 6C59
dodec-7-enyl-8-hydroxy-, detmn., potentiom., 6A6
8-hydroxy-, detmn., potentiom., 6A6
8-hydroxy-5,7-di-iodo-, detmn. in presence of clioquinol, volum., 4E38
ıoline derivatives, review of g.l.c. studies of, 2C46
.v.-spectroph. study of, 4E8
ıoline-5-sulphonic acid, 8-hydroxy-, as metallo-fluorescent indicator, 2B46
ıolinic acid, see *Pyridine-2,3-dicarboxylic acid*
ıomethionate, detmn. in fruit or vegetables, by g.l.c., 2G30
ıones, electrochem. study of, in anhyd. HF medium, 4C33
ıtozene, detmn. in lettuce or soil, by g.l.c., 2G23

R

X, see 1,3,5-*Triazine, hexahydro*-1,3,5-*trinitro*-
A, see *Nucleic acids, ribo*-
A polymerase, see under *Enzymes, specific*
liations, detection, see also *Scintillation counting*
comparison of performances of Si(Li) and Ge(Li) devices at low energies, 6B95
position-sensitive proportional counters for, 2J148
alpha-, detection, automatic detmn. of high track densities in polymer devices for, 3J90
by liquid scintillation counting with pulse-shape discrimination, 2J146
beta-, detection, by Cerenkov counting, 2J147
by liquid scintillation counting with pulse-shape discrimination, 2J146
use of scintillation counter for absolute measurements in, 3J91
gamma-, detection, by Cerenkov counting, 2J147
lioactivation analysis, report of conferences on, 5A5, 6A3
imult. β,γ-coincidence system for, 5J109
by charged particles, analysis of surfaces and thin films by, 2J156
uantitative multi-element analysis by, 2B9
by neutrons, apparatus for, for monitoring slurries, soln. and fluidised powders, 2J151*P*
pplications of, in environmental studies of trace elements, review, 2J149
in forensic analysis, 2A10
of Pu - Be neutron source in, 2J150
utomated, data-acquisition system for, 1J86
Radioactivation analysis, by neutrons—*continued*
automated absolute technique for, 2J152
calculation of equi-activation lines in, 2J153
high-flux absolute multi-element technique for, for analysis of tree-ring samples, 5J108
multi-element detmn. by absolute, 2A7
of elements of short half-life, with 14·1-MeV neutrons from low-flux generator, 5J107
optimisation of irradiation and decay times in, 2J154
service for detmn. of elements by, 1J87
short-lived isotopes for use in non-destructive, 3J92
theory, practice and applications of, 2J158*B*
use of two- or three-fold γ-coincidence measurements in, 2J155
Radiochemistry, preparation of high-purity substances in, 4A12
Radioisotopes, modified three-channel counter for simult. counting of six γ-emitting, 4D7
sepn., by g.c., review, 3B1
by g.s.c., 3B83
liquid chrom., on pressurised cellulose column, 2B4
Radium, detmn. of ^{226}Ra in biol. materials or water, emanation apparatus for, 2H25
extraction from molten nitrate media, with copper(II) bis-(2-ethylhexyl) phosphate, 3B17
Raffinose, detmn. in sugar products, enzymic, 6F7
Rapeseed, contents of isothiocyanates and vinyloxazolidinethione of, 2G13
detmn. of erucic acid in, by g.l.c. of methyl ester, automated, 2G11
of oil, protein and H_2O in, near-i.r. reflectance spectroph., 3G5
Rapeseed oil, chemical and physical properties of, and detection in almond or olive oil, 5F63
contents of isothiocyanates and vinyloxazolidinethione of, 2G13
detection and detmn. of toxic compounds in, by g.l.c. - t.l.c., 2F8
detmn. of amide- or amine-N in, by acidic extraction - Kjeldahl method, 3F50
of polymeric fatty acids in, by t.l.c. of methyl esters, 2G12
Rare-earth metals, detmn. in alkaline-earth-metal fluorides, spectrogr., 6B59
in glass, complexom., optimum conditions for, 6B232
in rare-earth concentrates, by n.a.a., 6B85
in soln. obtained from leaching of minerals with H_2SO_4, indirect complexom. or colorim., 2B62
in presence of PO_4^{3-}, complexom., 3B72
sepn., by selective sorption, 3B73
from Am and Cm, liquid chrom., 6B107
from Ta, by solvent extraction, 6B157
—, **cerium-group,** detmn., photom., 5B96
Rare-earth metals, reagent for, alizarin, 5B96
Rare-earth-metal complexes, with acetylacetone, thermal decomposition of, 5A6*C*
with bromopyrogallol red and hexadecylpyridinium ions, 6B90
with sulphonazo III, 5B93
Rare-earth-metal compounds, detmn. of Cr in, colorim., 1B64
Rauwolfia alkaloids, sepn., by t.l.c., 4E17
Rauwolfia serpentina, detmn. of rescinnamine and reserpine in extracts of, by t.l.c. - u.v. spectroph., 6E8
Reagents, organic, detmn. of chelate-forming, potentiom., 6A6
in inorg. analysis, 6B240*B*

Reagents, organic—*continued*
(Less common reagents are indexed below; detailed studies of specific reagents are additionally indexed under the reagent name. See also *Dyes*; *Indicators*)
acetohydroxamic acid, 6A8
2-acetoxy-*N*-phenylbenzohydroxamic acid, 6B180
5-amino-3-(3-chloro-2-hydroxy-5-nitrophenylazo)-4-hydroxynaphthalene-2,7-disulphonic acid, 6B138
5-amino-2,3-dihydrophthalazine-2,4-dione, 2B151, 2C23
N-(2-aminoethyl)-*N*-[(2-pyridylmethyleneamino)ethyl]dithiocarbamic acid, 4B26
4-amino-6-hydroxy-2-mercaptopyrimidine, 6A10
2-aminoperimidine, 4H27
3-amino-5-sulphosalicylic acid, 4B43
7-(α-anilinobenzyl)-8-hydroxyquinoline, 3B113
(α-anilinobenzyl)phosphonic acid octyl ester, 1B122
antipyrinyl-[4-(benzylmethylamino)phenyl]-4-dimethylaminophenylmethanol, 6B186
apigenin (4′,5,7-trihydroxyflavone), 4B45
αα′-azinodi-(3-hydroxy-2-picoline), 5B206
aziridin-1-ylphosphonic acid dimethyl ester, 6B220
azomethine H (4-hydroxy-5-salicylideneaminonaphthalene-2,7-disulphonic acid), 3G8
6-(2-benzothiazolylazo)-5-bromo-*m*-cresol, 3B68
5-benzoxazol-2-yl-1,3-diphenylformazan, 3B54
2-benzoyl-3′-nitroacetanilide, 5B205
5-(1-benzylbenzimidazol-2-yl)-3-methyl-1-(4-nitrophenyl)formazan, 6B80
benzylhexadecyldimethylammonium chloride, 6B53
2,2′-bi-indan-1,1′,3,3′-tetrone, 4B86
bindone (2,2′-bi-indan-1,1′,3,3′-tetrone), 4B86
1,2-bis-(2-aminoethoxy)ethane-*NNN′N′*-tetraacetic acid, 1D6
3,6-bis-(5-chloro-2-hydroxy-3-sulphophenylazo)-chromotropic acid, 1B109
bis-[(1,8-dihydroxy-3,6-disulpho-2-naphthyl)-methyl]methylammonium chloride, 2B85
bis(di-isopropoxyphosphinothioyl) disulphide, 3D116
bis(dimethoxyphosphinothioyl) disulphide, 2B153
4,4′-bis(dimethylamino)thiobenzophenone, 2H32
5,6-bis(diphenylphosphinyl)norborn-2-ene, 6B106
bis-(2-ethylhexyl) phosphorodithioate, 1B35
bis(salicylidene)ethylenediamine, 4B31
9,9′-bixanthene, 5B74
2-bromobutyric acid, 4B79
4-(2-bromo-4,5-dihydroxyphenylazo)benzenesulphonic acid Na salt, 5B188
9-bromomethylacridine, 1E33
bromomethylchlorodimethylsilane, 6D38
butyrohydroxamic acid, 6A8
Cd ethylxanthate, 6E40
2-carboxy-1-hydroxyanthraquinone, 6B214
6-carboxy-6′-hydroxy-3′,5′-dimethylazobenzene-4-sulphonic acid [2-(2-hydroxy-3,5-xylylazo)-4-sulphobenzoic acid], 3B159
9-(2-carboxyphenyl)-2,6,7-trihydroxyxanthen-3-one, 2B17
9-(2-carboxyphenyl)-2,6,7-trihydroxyxanthen-3-one ethanediol ester, 2B17
Cat-Floc [poly(diallyldimethylammonium chloride)], 6F9
chlorindazon DS [4-(6-chloroindazol-3-ylazo)-3-hydroxynaphthalene-2,7-disulphonic acid], 4B152, 4B156
5-chloro-3-(2,4-dihydroxyphenylazo)-2-hydroxybenzenearsonic acid, 5B199
5-chloro-3-(2,4-dihydroxyphenylazo)-2-hydroxybenzenesulphonic acid, 4B121, 6E25

Reagents, organic—*continued*
5-chloro-2-hydroxy-3-(2-hydroxy-1-naphthylazo)-benzenesulphonic acid, 5B199
4-(6-chloroindazol-3-ylazo)-3-hydroxynaphthalene-2,7-disulphonic acid, 4B152, 4B156
4-chloro-*o*-phenylenediamine, 4B150
N-(4-chlorophenyl)succinamic acid, 3B75
4-(5-chloro-2-pyridylazo)-*m*-phenylenediamine, 4B153
chlorpromazine, 2A14
chlorsulphophenol S [3,6-bis-(5-chloro-2-hydroxy-3-sulphophenylazo)chromotropic acid], 1B109
Chrompyrazol I {antipyrinyl-[4-(benzylmethylamino)phenyl]-4-dimethylaminophenylmethanol}, 6B186
1,1-diantipyrinylbutane, 1B70, 5B210
αα-diantipyrinyl-3,4-dimethoxytoluene, 5B184
1,1-diantipyrinylheptane, 1B98
αα-diantipyrinyl-2-nitrotoluene, 1B98
5,7-dibromo-8-hydroxyquinoline, 2B123
2-(3,5-dibromo-4-methyl-2-pyridylazo)-5-diethylaminophenol, 2B78
4-(3,5-dibromo-4-methyl-2-pyridylazo)-*m*-phenylenediamine, 2B79
2,2′-dichlorodithizone, 5A9
3′,5′-dichloro-2-hydroxyacetophenone oxime, 1B25
3′,5′-dichloro-2′-hydroxyacetophenone oxime, 5B201
5,7-dichloro-8-hydroxyquinoline, 4B54
2,6-dichloro-4,4′-iminodiphenol, 3B138
4,7-dichloroquinoline hydrobromide perbromide, 2C37
NN′-didodecyldithio-oxamide, 4B19
3-diethylamino-2-[3-(1-methyl-2-piperidyl)-2-pyridylazo]phenol, 1B46, 1B96
5-diethylamino-2-(2-pyridylazo)phenol, 5B112
5-diethylamino-2-(2-thiazolylazo)phenol, 4B59
9,10-dihydro-1-hydroxy-9,10-dioxo-2-anthroic acid, 5B60
2,3-dihydro-6-phenyl-1,2,4-triazine-3-thione, 3B38
dihydroxycyclobutenedione, 3A5
4-(2,4-dihydroxyphenylazo)-3-hydroxynaphthalene-2-sulphonic acid, 6B128
2′,4′-dihydroxyvalerophenone oxime, 5B40
1,3-di-isopropyl-2-(4-nitrobenzyl)pseudourea, 4C21
2,6-dimercapto-3-methylthiopyran-4-one, 1B148
2,3-dimercaptopropane-1-sulphonic acid Na salt, 4B10
5,5′-(3,3′-dimethoxy-4,4′-biphenylylenebisazo)-bis(salicylic acid), 4B32
7-dimethylamino-3,4-dihydroxy-3-sulpho-3*H*-phenoxazine-1-carboxylic acid di-Na salt, 3B98
N-(7-dimethylamino-4-methylcoumarin-3-yl)-maleimide, 2D128
5-dimethylamino-2-nitrosophenol, 4B139
5-dimethylamino-2-(2-thiazolylazo)phenol, 4B96
10,10′-dimethyl-9,9′-biacridinium dinitrate, 6B194
5,5′-(3,3′-dimethyl-4,4′-biphenylylenebisazo)bis-(salicylic acid), 4B32
dimethyldioctadecylammonium chloride, 6B178
1,6-dimethyl-2-[(1-methyl-4-(1*H*)-quinolinylidene)methyl]quinolinium iodide, 4B39
2,4-dimethylpentan-3-one oxime, 2B154
dinaphthoylmethane [1,3-di-(2-naphthyl)-propane-1,3-dione], 1B38
1,3-di-(2-naphthyl)propane-1,3-dione, 1B38
3,5-dinitrocatechol, 4B74, 5B143
dioctylsulphosuccinic acid Na salt, 2E5
3,5-diphenyl-2-pyrazoline-1-carbodithioic acid, 4B2
5,6-diphenyl-3-(2-pyridyl)-1,2,4-triazine, 4B161

ents, organic—*continued*
phenylthioviolurie (5-hydroxyimino-1,3-diphenyl-2-thiobarbituric) acid, 1B19
2-pyridyl ketoxime, 2B154, 6B26, 6B223
thiobenzoic acid, 2B156, 5B214
dithionaphtholic acid, 2B150
GTA [1,2-bis-(2-aminoethoxy)ethane-*NNN'N'*-tetra-acetic acid], 1D6
ethoxycarbonyl-5-hydroxy-1-(4-tolyl)pyridin-4-one, 2B104
ethylamino-2-(2-quinolylazo)-*p*-cresol, 3B50
ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic acid, 5B187
nylenebis(diphenylphosphine oxide), 6B106
'-ethylenedinitrilobis-(*o*-cresol), 5B47
4'-ethylenedinitrilobis(pentan-2-one), 5B47
nylenediphosphonic acid tetraethyl ester, 6B106
ethyl-2-(2-thiazolylazo)phenol, 3B14
nylthiocarbamic acid *O*-isopropyl ester, 2B3
ethyl-2-thiohydantoin, 4B134
(ethylthio)-3-hydroxy-5-mercapto-1,2,4-triazine, 6B224
rrozine [3-(2-pyridyl)-5,6-bis-(4-sulphophenyl)-1,2,4-triazine di-Na salt], 4A3*C*, 5D13
(3-formyl-4-hydroxyphenylazo)benzene-sulphonic acid Na salt, 3B167
rfuryliminodiacetic acid, 6B196
llion [5-amino-3-(3-chloro-2-hydroxy-5-nitrophenylazo)-4-hydroxynaphthalene-2,7-disulphonic acid], 6B138
ptane-3,5-dione, 1B7
ptan-4-one oxime, 2B154
xafluoroacetylacetone (1,1,1,5,5,5-hexafluoropentane-2,4-dione), 2B47
1,1,5,5,5-hexafluoropentane-2,4-dione, 2B47
xahydroazepine-1-carbodithioic acid ethyl ester, 4B2
3,3',4,4',5'-hexahydroxybenzophenone, 4B117
rdrorubeanic acid (2-imino-2-mercaptothioacetamide), 2B39
hydroxybenzo[*a*]phenazine, 1B39
hydroxy-2-carboxyanthraquinone (9,10-dihydro-1-hydroxy-9,10-dioxo-2-anthroic acid), 5B60
-hydroxychalcone, 2B41
hydroxycyclohepta-2,4,6-trien-1-one, 1B115
hydroxy-5,7-di-iodoquinoline, 1B67
-hydroxy-*NN'*-diphenylbenzamidine, 1B160
hydroxy-7-(2-hydroxy-5-nitro-3-sulphophenylazo)naphthalene-1,6-disulphonic acid, 3B156, 4B44
hydroxy-3-[2-hydroxy-3-(2,4-xylylcarbamoyl)-naphthylazo]benzenesulphonic acid, 6D8
hydroxy-7-iodoquinoline-5-sulphonic acid, 1B108
hydroxyiminoacetoacetanilide benzoylhydrazone, 1B170
hydroxyiminoaceto-*o*-toluidide benzoylhydrazone, 1B170
hydroxyimino-1,3-diphenyl-2-thiobarbituric acid, 1B19
hydroxyimino-2-thiobarbituric acid, 1B161
-hydroxy-4-methoxy-5'-methylchalcone, 3B24
-hydroxy-4-methoxy-5'-methylchalcone oxime, 4B164
hydroxy-2-methyl-1-phenylpyridin-4-one, 4B101
hydroxy-3-methyl-1-phenyl-2-thiourea, 4B25
hydroxy-2-methylpyran-4-one, 3B36
hydroxy-1-naphthaldehyde - Girard T deriv., 5B44
hydroxy-2-nitroso-3*H*-naphtho[2,1-*b*]pyran-3-one, 1B158

Reagents, organic—*continued*
8-hydroxy-7-nitrosoquinoline-5-sulphonic acid Na salt, 5E5
9,9'-(2-hydroxyphenylene)di-(2,6,7-trihydroxyxanthen-3-one), 2B17
4-(2-hydroxyphenyliminomethyl)resorcinol, 1B97
4-(4-hydroxyphenyliminomethyl)resorcinol, 1B55
3-hydroxy-3-phenyl-1-(3-pyridyl)triazen, 6B209
8-hydroxyquinoline-5-sulphonic acid, 6B156
4-hydroxy-5-salicylideneaminonaphthalene-2,7-disulphonic acid, 3G8
3-hydroxy-4-(2-thiazolylazo)naphthalene-2,7-disulphonic acid, 1B29
2-(2-hydroxy-3,5-xylylazo)-4-sulphobenzoic acid, 3B159
2-imino-2-mercaptothioacetamide, 2B39
isonicotinaldehyde benzothiazol-2-ylhydrazone, 3D46
Pb xanthate, 3B35
lucigenin (10,10'-dimethyl-9,9'-biacridinium dinitrate), 6B194
luminol (5-amino-2,3-dihydrophthalazine-1,4-dione), 2B151, 2C23
lumogallion [5-chloro-3-(2,4-dihydroxyphenylazo)-2-hydroxybenzenesulphonic acid], 4B121, 6E25
magneson KhS [5-chloro-2-hydroxy-3-(2-hydroxy-1-naphthylazo)benzenesulphonic acid], 5B199
5-mercapto-3-(2-naphthyl)-1,3,4-thiadiazoline-2-thione, 6B169
2-mercaptopyridine 1-oxide, 2B76
8-mercaptoquinoline, 1B57, 1B179
6-mercapto-2,4-xylenol, 4B4
2-methoxy-*N*-(*p*-tolyl)benzohydroxamic acid, 4B60
4-methoxy-*N*-(*m*-tolyl)benzohydroxamic acid, 1B13
N-methylaminothioformyl-*N*-phenylhydroxylamine (1-hydroxy-3-methyl-1-phenyl-2-thiourea, 4B25
N-methylanabasine-α'-azo-*p*-cresol {2-[5-(1-methyl-2-piperidyl)-2-pyridylazo]-*p*-cresol}, 2B132
N-methylanabasine-α'-azodiethyl-*m*-aminophenol {3-diethylamino-2-[3-(1-methyl-2-piperidyl)-2-pyridylazo]phenol}, 1B46, 1B96
methylenebis(diphenylphosphine oxide), 6B106
1,1'-methylenebis-(4-ethyl-3,5-dipropylpyrazole), 2B36
5,5'-methylenedi(salicylic acid), 6B179
5-methylhexane-2,4-dione, 1B7
4-methyl-2-(2-hydroxy-1-naphthylazo)thiazole, 6B73
4,4',4''-methylidynetris(aniline), 1B125
3-methyl-1-phenylpyrazolin-5-one, 6B89
6-methylpicolinaldehyde thiosemicarbazone, 4B166
2-[5-(1-methyl-2-piperidyl)-2-pyridylazo]-*p*-cresol, 2B132
3-methyl-1-tolylpyrazolin-5-one, 6B89
nalidixic (1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridine-3-carboxylic) acid, 5B187
naphthalene-2,3-diamine, 4B110, 5F9
naphthylbismuthiol [5-mercapto-3-(2-naphthyl)-1,3,4-thiadiazoline-2-thione], 6B169
N-(1-naphthyl)succinamic acid, 3B75
3,3',3''-nitrilotripropionic acid, 3B47
4-(4-nitrophenylazo)catechol, 4B82
4-nitro-*o*-phenylenediamine, 5B46
5-nitrosalicylic acid, 3B116
3-nitroso-4-hydroxy-5,6-benzocoumarin {1-hydroxy-2-nitroso-3*H*-naphtho[2,1-*b*]pyran-3-one}, 1B158
3-nitro-5-sulphosalicylic acid, 1B107

Reagents, organic—*continued*
3-nitro-*N*-(*m*-tolyl)benzohydroxamic acid, 1B42, 5B101, 5B102
4-(5-nonyl)pyridine, 1B121
4-(5-nonyl)pyridine oxide, 5B107
pachycarpine, 5B36
3,3′,4′,5-pentahydroxybenzophenone, 3B130
3,3′,4′,5,7-pentahydroxyflavone-6′-sulphonic acid, 3B97, 6B139
syn-phenyl 2-pyridyl ketoxime, 1B172
2-phenylcinchoninic acid, 6B83
N-phenylcinnamohydroxamic acid, 4B78, 5B150
N-phenyl-2-naphthohydroxamic acid, 1B106
3-phenyl-2-phenyliminoselenazolidin-4-one deriv., 5B2
phenylphosphonic acid octyl ester, 1B102
'phthalophenone', 3B46
picolinaldehyde 2-quinolylhydrazone, 6B28
picolinaldehyde thiosemicarbazone, 5B16
pinaverdol {1,6-dimethyl-2-[(1-methyl-4(1*H*)-quinolinylidene)methyl]quinolinium iodide}, 4B39
piperidine-1-carbodithioic acid, 5B35
poly(diallyldimethylammonium chloride), 6F9
poly-(8-hydroxy-5-vinylquinoline), 6B12
poly(vinyl sulphate), 6F9
K benzylxanthate, 6B171
K ethylxanthate, 3D14, 3D27
K propylxanthate, 3B166
propionaldehyde (3-phenyl-2-quinoxalinyl)-hydrazone, 1C25
propylfluorone, 1B33
purpurinsulphonic (1,2,4-trihydroxy-9,10-dioxoanthracene-3-sulphonic) acid Na salt, 6B140
pyrazinecarboxamide, 5B202
pyrazine-2,3-dicarboxylic acid, 3B143
2,2′-pyridil di-2-pyridylhydrazone, 5A10
pyridine-2-aldehyde-2′-hydroxynaphthylimine [1-(2-pyridylmethyleneamino)-2-naphthol], 3B39
2,2′-[pyridine-2,6-diylbis(methylidynenitrilo)]-diphenol, 5B106
3-(2-pyridyl)-5,6-bis-(4-sulphophenyl)-1,2,4-triazine di-Na salt, 4A3*C*, 5D13
1-(2-pyridylmethyleneamino)-2-naphthol, 3B39
pyrogallobenzein (4,5,6-trihydroxy-9-phenylxanthen-3-one), 6B77
pyrrolidine-1-carbodithioic acid, 4B120
pyrrolidine-2-thione, 4B29
quercetin, 3B41, 3B97, 5B87
quercetinsulphonic (2,3′,4′,5,7-pentahydroxyflavone-6′-sulphonic) acid, 3B97, 6B139
quinoxaline-2,3-dithiol, 4B163
Redoxan II (αα-diantipyrinyl-3,4-dimethoxytoluene), 5B184
resacetophenone oxime, 6B195
resorcylal-*m*-aminophenol [4-(4-hydroxyphenyliminomethyl)resorcinol], 1B55
resorcylal-*o*-aminophenol [4-(2-hydroxyphenyliminomethyl)resorcinol], 1B97
rezarson [5-chloro-3-(2,4-dihydroxyphenylazo)-2-hydroxybenzenearsonic acid], 5B199
SPADNS [3-(4-sulphophenylazo)chromotropic acid], 2H38, 6H39
salicylaldehyde isonicotinoylhydrazone, 2B59
salicylbisfluorone [9,9′-(2-hydroxyphenylene)di-(2,6,7-trihydroxyxanthen-3-one], 2B17
salicylfluorone, 4B123
3-salicylidenedithiocarbazic acid methyl ester, 1B44
selenazolidine-2,4-dione deriv., 5B2
sorbohydroxamic acid, 6A8
squaric acid (dihydroxycyclobutenedione), 3A5

Reagents, organic—*continued*
sulphonitrazo [8-hydroxy-7-(2-hydroxy-5-nitro-3-sulphophenylazo)naphthalene-1,6-di-sulphonic acid], 3B156, 4B44
3-(4-sulphophenylazo)chromotropic acid, 2H38, 6H39
1,3,13,15-tetra-t-butyldibenzo-18-crown-6, 6B22
4,5,6,7-tetrachloro-3′,4′,5′,6′-tetrahydroxy-fluoran methyl ester [3,4,5,6-tetrahydroxy-9-(2,3,4,5-tetrachloro-6-methoxycarbonylphenyl)xanthylium], 2B12
1,2,3,4-tetrahydro-6-hydroxy-5-nitrosopyrimidine-2,5-dione, 6B197
3,4,5,6-tetrahydroxy-9-(2,3,4,5-tetrachloro-6-methoxycarbonylphenyl)xanthylium, 2B12
1,4,8,11-tetrathiacyclotetradecane, 2B37
thiomaltol (3-hydroxy-2-methylpyran-4-one), 3B36
thio-oxine (8-mercaptoquinoline), 1B57, 1B179
thiothenoyltrifluoroacetone [1,1,1-trifluoro-4-mercapto-4-(2-thienyl)but-3-en-2-one], 2B35, 2B128, 3B43
thioridazine hydrochloride, 1B171
thiovioluric (5-hydroxyimino-2-thiobarbituric acid, 1B161
tichromin {bis-[(1,8-dihydroxy-3,6-disulpho-2-naphthyl)methyl]methylammonium chloride}, 2B85
8-(toluene-*p*-sulphonamido)quinoline, 1B12
N-(*p*-tolyl)succinamic acid, 3B75
tridodecylethylammonium bromide, 5B186
triethylhexadecylammonium iodide, 1B54
1,1,1-trifluoro-4-mercapto-4-(2-thienyl)but-3-en-2-one, 2B35, 2B128, 3B43
4,4,4-trifluoro-1-phenylbutane-1,3-dione, 6B88
2′,3′,4′-trihydroxyacetophenone, 2B43
2,3,4-trihydroxybenzophenone, 4B117
2,4,4′-trihydroxybenzophenone, 6B165
1,2,4-trihydroxy-9,10-dioxoanthracene-3-sulphonic acid Na salt, 6B140
4′,5,7-trihydroxyflavone, 4B45
4,5,6-trihydroxy-9-phenylxanthen-3-one, 6B77
2′,3′,4′-trihydroxypropiophenone, 4B117
2,6,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
trioctylamine oxide, 5B107
trioctylphosphine oxide, 6B220
2,4,6-tris-(2-pyridyl)-1,3,5-triazine, 3D25
tropolone (2-hydroxycyclohepta-2,4,6-trien-1-one), 1B115
unithiol (2,3-dimercaptopropane-1-sulphonic acid Na salt), 4B10
cis-vinylenebis(diphenylphosphine oxide), 6B106
cis-vinylenebis(ditolylphosphine oxide), 6B106
xylidyl blue I {4-hydroxy-3-[2-hydroxy-3-(2,4-xylylcarbamoyl)naphthylazo]benzene-sulphonic acid}, 6D8
Zn ethylxanthate, 6E40
zirconin (7-dimethylamino-3,4-dihydroxy-3-sulpho-3*H*-phenoxazine-1-carboxylic acid di-Na salt), 3B98

Redcurrant juice, detmn. of isocitric acid in, enzymic, removal of interfering substances in, 4F20

Reflectometry, apparatus for, time-sharing instrument for alternative use as fluorimeter or spectrophotometer, 1J32
device for axis variation of angle of incidence in, 2J118

Refractometry, of liquids, microsc. technique for, 2J120
of small particles, with use of interference microscope, 5J123
thermo-optic technique for studies of fused alkali-metal nitrates, 1J62

actory materials, detmn. of alkali and alkaline-earth metals in, flame spectrom., 1B178
of Ca in dolomite or magnesite, X-ray emission spectrom., 5B218
of elements in, by n.a.a., 6B236
of elements in oxides, by a.a.s., 3J59
of H, N and O in metals or alloys, by g.s.c., 3B20
of Ru in alloys, spectroph., 6B221
ssolution method for, 1A1*C*
innamine, detmn. in *Rauwolfia* extracts or pharmaceutical preparations, by t.l.c. - u.v. spectroph., 6E8
rpine, detmn. in presence of papaverine, phenobarbitone and theobromine, spectroph., 5E10
in *Rauwolfia* extracts or pharmaceutical preparations, by t.l.c. - u.v. spectroph., 6E8
p.l.c. study of, 2E49
n acids, sepn. from fatty acids and analysis, by g.l.c. of methyl esters, 2H46
ns, synthetic, identn., by thermofractography, 5C60
lkyd, analysis, applications of gel-chrom. methods in, review, 4C87
recommended procedures for, 4C86
entn. and detmn. of carboxylic acids in, by g.l.c., preparation of methyl esters for, 3F49
poxy-, analysis, applications of gel-chrom. methods in, review, 4C87
plications of m.s. in studies of, 2A1*C*
urie-point pyrolysis - g.c. study of, 4C77
tmn. of OH-groups in, i.r. spectroph., 4C85
of hydroxyl value of, volum., 3C85
of H_2O in electrostatically sprayable, comparison of methods for, 2C77
henol - formaldehyde, characterisation of acetylated, by n.m.r., 6C70
tmn. in paper or wood, problems arising in, 6C83
of free, by t.l.c. - densitom., 3C84
pn. of oligomers of, gel chrom., 4C83
olyester, identn. and detmn. of carboxylic acids in, by g.l.c., preparation of methyl esters for, 3F49
urea - formaldehyde, analysis, applications of gel-chrom. methods in, review, 4C87
nethrin, detmn. in corn, cornmeal, flour or wheat, by g.l.c., 4G39
rcinol, detection, by t.l.c. - enzymic, 3D120
tection and detmn., by t.l.c., 2C36
tmn. of catechol in, potentiom., 5C31
entn., colour reaction for, 6E22
5-methyl-, detection and detmn., by t.l.c., 2C36
5-pentyl-, identn., and identn. of 2- and 4-methyl ethers of, in pyrolysis products of cannabidiol, 1E9
2,4,6-trinitro-, detmn. in industrial wastes, u.v. spectroph., 2H47
noic acid, detmn. in lotions, gels and creams, spectroph., 1E22
nol, detmn., spectroph., 3D115, 4D68
pn. from cholecalciferol and α-tocopherol, by h.p.l.c., 2J10
mnose, detmn., spectroph., manual and automated procedures for, 6C21
in presence of other carbohydrates, by t.l.c. - densitom., 3C13
pn. from other carbohydrates, liquid chrom., 1D41
nium, co-extraction of, with In, Fe or Tl complexes of 1-(2-pyridylazo)-2-naphthol, 4B13

Rhenium—*continued*
detmn., by a.a.s., concn. method for, 4B119
fluorim., 4B136
comparison of reagents for, 6B190
oscillopolarogr., 6B192
photom., 1B134
spectroph., 1B133
in alumina - rhenium catalysts, polarogr., 2B129
in Cu - Mo ores, photom., 6B191
in minerals, ores or rocks, spectroph., 5B178
in molybdenum, by n.a.a., 5B169
in presence of Mo and other elements, reversed-phase chrom. - u.v. spectroph., 4B137
in tungsten, by n.a.a., 5B169
sepn. from Cu, Au and Zn, electroph., 1B167
from Mo, by electro-dialysis, 2B130
from Mo, W and V, ion-exchange chrom., 4B18
from other elements, by g.s.c., 3B83
solvent extraction of, with esters of dithiocarbamic acids, 4B2
with mesityl oxide - benzene from H_2SO_4 medium, 3B142
Rhenium, reagents for, antipyrine - *S*-benzylthiouronium ion, 1B134
butylrhodamine, 6B190
phenosafranine, 6B190
Rhodamine B, 4B136, 6B191
Rhodamine 6Zh, 6B190
safranine T, 6B190
SCN^- - thiourea, 1B133
Rhenium complexes, with mercaptoacetic acid, 1B134
with thiourea, detmn. of S in, volum., 2B113
Rhenium ores, detmn. of Re in Cu- and Mo-containing, fluorim., 4B136
Rhodanese, see *Enzymes, specific,* thiosulphate sulphurtransferase
Rhodium, detmn., by a.a.s., 2B158
with use of micro-probe - flame - adapter atomiser, 3B7
by chemiluminescence method, 2B151
spectrogr., 1B166
spectroph., 2B151, 3B161, 3B162
in copper, spectrochem., 4B28
in industrial materials, by X-ray fluorescence analysis, 4B17
in minerals, ores or rocks, reference standard for, 5B209
spectrogr., 5B212
in presence of other elements, by a.a.s., 4B160
sepn. from Ir, ion-exchange chrom., 4B162
solvent extraction of, with esters of dithiocarbamic acids, 4B2
with heptan-4-one oxime, 2B154
with organophosphorus compounds - $SnBr_2$, 6B220
sorption of, on sulphides from acid soln., 4B3
Rhodium, reagents for, cdta, 3B161
edta, 3B161
Eriochrome cyanine R, 3B162
Ribitol, sepn. from other polyols, by t.l.c. or paper chrom., 3C11
Riboflavine, detmn., by chemiluminescnce method, 5E4
differential pulse or d.c. polarogr., 1E21
in foods, automated, 3F52
comparison of automated and manual methods for, 5F70
in presence of other vitamin B compounds, by t.l.c. - densitom., 2E23
sepn. from other vitamin B compounds, by t.l.c., 2E22

Ribose, sepn. from other carbohydrates, liquid chrom., 1D41
Rice, detection of aflatoxins in, fluorescence reaction for, 5F14
of carbamate pesticides in unpolished, by t.l.c., clean-up method for, 6F24
detmn. of As in, by a.a.s., 3F5
of *N*-nitrosamines in, by g.c., 6F5
of organophosphorus pesticides in, comparison of extraction methods for, 5G34
of Si in plants of, spectroph., 1G1
identn. of inositol hexaphosphate in, 5G3
Rifamycin S, detmn. in rifamycin SV, by t.l.c. - spectroph., 3E23
Rifamycin SV, detmn. in presence of rifamycin S, by t.l.c. - spectroph., 3E23
Rimantadine hydrochloride, microcrystalline reaction products of, 6E31
Ring-oven analysis, review, 5J18
Rivanol, see *Ethacridine lactate*
Robenidine, detmn., by automated h.p.l.c., 2G18
in feeding-stuffs, by t.l.c. - spectroph., 3G19
spectroph., 4G16
Rocks, see *Minerals, ores and rocks*
Roksol K, detmn., amperom. or nephelom., 5C47
Ronnel, see *Fenchlorphos*
Rose apple, see under Eugenia *spp.*
Rosin, detmn. of iodine residues in modified, volum., 6C93
Rotenone, sepn. from related compounds and detmn. in formulations, by h.p.l.c., 4G40
Roxarsone, detmn. in pre-mixes, by a.a.s., 4G15
Rubber, analysis, applications of integral and deriv. thermogravimetry in, 2A1*C*
detmn. of micro-structure of synthetic, by pyrolysis - g.c., 4C92
g.c. study of antioxidants for, 4A5*C*
sepn. and identn. of aromatic amines in vulcanised, by g.l.c. - i.r. and u.v. spectroph. - t.l.c., 1C81
Rubidium, detmn., by a.a.s., with laser source, 6B25
in biol. materials, by a.a.s., 3D8
in minerals, ores or rocks, flame emission spectroph., 5B34
in plants, by n.a.a., 5G1
flame emission spectroph., 6J54
X-ray emission spectrom., 3D7
in refractory materials, flame spectrom., 1B178
in sediments, *in situ* X-ray emission spectrom., 6H25
in silicates, X-ray emission spectrom., 4B67
in urine, by n.a.a., 4D6
in water, by n.a.a., 2H16
in wine, X-ray emission spectrom., 3D7
Rubidium chloromolybdate, detmn. of Mo^{III} in, amperom. or spectroph., 2B26
Rubidium iodide, detmn. of impurities in, by m.s., 3B29
Rubratoxin B, detection in maize, by t.l.c., 5G23
Ruthenium, detection, colour reaction for, 6A10
detmn., by kinetic - spectroph. method, 1B169
spectrogr., 1B166
spectroph., 2B150, 4B161
voltamm., 5B213
in air, radiochem., 1A1*C*
in biol. materials, by n.a.a., 4B111
in catalysts, X-ray emission spectrom., 6C8
in industrial materials, by X-ray fluorescence analysis, 4B17
in minerals, ores or rocks, by n.a.a., 4B111
reference standard for, 5B209
in organoruthenium compounds, X-ray emission spectrom., 6C8
Ruthenium, determination—*continued*
in presence of Os, spectroph., 1B168
of other elements, by a.a.s., 4B160
in refractory alloys, spectroph., 6B221
sepn. from Os, electroph., 1B167
from other elements, by g.s.c., 3B83
by solvent extraction, 5B210
from Pd and Pt, by t.l.c., 1B19
solvent extraction of, with esters of dithi carbamic acids, 4B2
with organophosphorus compounds - SnBr 6B220
sorption of, on sulphides from acid soln., 4B3
Ruthenium, organic compounds of, detmn. of R in, X-ray emission spectrom., 6C8
Ruthenium, reagents for, 4-amino-6-hydroxy- mercaptopyrimidine, 6A10
5,6-diphenyl-3-(2-pyridyl)-1,2,4-triazine, 4B161
β-dithionaphtholic acid, 2B150
edta - 2-mercaptobenzimidazole, 1B168
thiourea, 6B221
Rutile, emanation thermal analysis of, 5A6*C*
Rutin, detmn., by chemiluminescence method, 5E
Rye, detmn. of V in straw or grain of, spectroph 4D11

S

Saccharin, detection in pharmaceutical preparations by t.l.c., 6E43
detection and detmn. in foods or pharmaceutica preparations, by t.l.c. - spectroph., 5F40
detmn., by methylation - g.l.c., 5F41
in foods, by g.l.c. of *N*-methyl deriv., 6F23
not recommended for use as analytical standard 4A11
— **sodium,** detection in pharmaceutical prepara tions, by t.l.c., 6E43
Sage, detmn. of triazine herbicides in, by t.l.c. 1G13
Salicylaldehyde, detmn., bromim., 2C37
Salicylaldoxime, detmn., potentiom., 6A6
Salicylamide, detmn. in analgesic tablets, by g.l.c. 6E4
in blood plasma, in presence of aspirin an salicylic acid, by g.l.c. of trimethylsily deriv., 1D23
in presence of aspirin, caffeine, paracetamo and phenacetin, by h.p.l.c., 1E27
of aspirin and paracetamol, non-aq potentiom., 4E28
of other drugs, spectroph., 2E30
Salicylanilide, 3,4′,5-tribromo-, detmn. in cosmetics partition chrom. - u.v. spectroph., 4C64
Salicylate, ion-pair-chrom. study of, 6C47
Salicylic acid, detmn., ion-pair partition chrom. u.v. spectroph., 2C40
in blood plasma, in presence of aspirin an salicylamide, by g.l.c. of trimethylsily deriv., 1D23
with its metabolites, fluorim., 2D33
in industrial wastes, by g.l.c. of methyl este 6H54
in presence of aspirin, by h.p.l.c., 1E27
Salicylic acid, acetyl-, anhydride, detmn. in aspirin spectroph., 2E32
Salicylic acid derivatives, detmn. in blood plasma or urine, fluorim., 1D24
Salicyluric acid, detmn. in blood plasma, fluorim. 1D24, 2D33
Saliva, assay of α-amylase in, improved dyed amylose for use in, 2D160
Salsolidine hydrochloride, detmn., spectroph., 5E15

um, detmn., gravim., 5B101
alkaline-earth-metal fluorides, spectrogr., 6B59
cerium(IV) oxide, spectrogr., 2B63
presence of Fe, or of Mg and Th, amperom., 1B66
rare-earth concentrates, by n.a.a., 6B85
water, by n.a.a., 2H16
pic analysis, by m.s., 5B99
. from other lanthanoids and Sc, by selective sorption, 3B73
om Pr, paper chrom., 3B3
ium, reagent for, 3-nitro-*N*-*m*-tolylbenzohydroxamic acid, 5B101
ium complex, with bromopyrogallol red and exadecylpyridinium ions, 6B90
ng, automatic device for, 3J3*P*
vater, report of symposium on automated, A4, 5H47
***aria* root,** detmn. of saponins in, by t.l.c., F24
., identn. and detmn. of saponins in, by .c. - fluorim., 3E13
ns, detection and detmn. in foods, by t.l.c., F24
., identn. and detmn., by t.l.c. - fluorim., E13
ysine, detmn., by chemiluminescence method, E4
ine, *N*-nitroso-, detmn., by g.l.c. of methyl eriv., 4F5
raut, detmn. of benzoic and sorbic acids in, v. spectroph., 3F19
um, 2B163*B*
n., with use of three-phase extraction system, B11
nn., fluorim., 6B83
air-borne dust, by n.a.a., 2H5
biol. materials, by n.a.a., 4D5
minerals, ores or rocks, fluorim., 1B62
spectrogr., 6B13
presence of lanthanoids and Y, by luminescence method, 4B54
of La, amperom., 6B82
of Th, complexom., 1B70
tin, by n.a.a., 5B124
water, by n.a.a., 2H16
. from Al, Cd, Ga, Au and Sc, by ion exchange, 1B2
om lanthanoids, by selective sorption, 3B73
ent extraction of, with dialkyl phosphates om perchlorate or nitrate medium, 6B84
um, reagents for, 5,7-dichloro-8-hydroxyuinoline, 4B54
dihydroxybenzaldehyde semicarbazone, 1B62
henylcinchoninic acid, 6B83
um oxide, detmn. of Gd and Tb in, by minescence method, 5B92
lation counting, detection of β- and γ-diation by Cerenkov, 2J147
ct of proton irradiation on operation of aI (Tl) counters, 2J144
(Tl) scintillation chamber for, 1J84
uid, 2J157*B*
y of α- and β-particles by, 2J146
puter system for data handling in, 1J85
at losses due to adsorption of [^{14}C]polyethylene glycol in phials for, 1J82
sphorescence effects in different types of hials for, 1J80
ple sorption in polyethylene phials used for, 105
ilisation of photomultipliers used in, 2J145

Scintillation counting—*continued*
system for rapid preparation of biol. samples for, 1J78
use of anthranilic acid and quinine as wavelength shifters in Cerenkov counting of ^{32}P, 1J83
use of high-density polyethylene phials in, 1J79
use of internal phial for detmn. of quench correction in studies of heterogeneous media, 1J81
use of non-ionic industrial detergents in, 5J104
Scintillators, thorium tetrabromide crystal as, 5J110
Scopolamine, see *Hyoscine*
Seasonings, detmn. of essential components of, review, and classification of, 2F32
Sebacic acid, detmn. of S in lubricants based on, gravim. or spectroph., 2C63
Sediments, detmn. of alkylmercury compounds in lacustrine, by steam-distillation - a.a.s., 3H38
of Cu and Pb in, polarogr., 5H24
of elements in, by a.a.s., 6H26
by n.a.a., sampling for, 2J149
by n.a.a. or spectrogr., 2H17
in situ X-ray emission spectrom., 6H25
of heavy metals in, by radioactivation analysis, 2A4*C*
of Hg in, by a.a.s., 5G6
of Hg in different chemical forms in, by a.a.s., 2F3
of metals in, X-ray spectrom., 1H26
of NO_3^- in, automated colorim., 3H23
of org. C in, by combustion - thermal-conductim., 4H29
of organochlorine pesticides in, by t.l.c., 1H41
of Os, Ru and Se in, by n.a.a., 4B111
of pesticides in, sampling and extraction methods for, 3G28
of polycyclic hydrocarbons in, by g.c. - m.s., 2A4*C*
by t.l.c. - fluorim., 1H38
of Ti in, spectroph., 5B126
of U in, photom., 3H21
extraction of amino-acids from, with use of superheated water, 3G12
recovery of polychlorinated biphenyls from, 2A4*C*
sepn. and detmn. of hydrocarbons in marine, by g.l.c. - m.s. and h.p.l.c., 6H51
Selenide, dimethyl, detmn. in air, by g.c. - a.a.s., 6H18
sepn. from other organometallic compounds, by g.l.c., 6C36
Selenium, detmn., amperom., 2B116
by a.a.s., 2A1*C*, 5J49
atomiser for hydride-generation method for, 2A1*C*
by automated Schmidt technique, 3B16
with use of micro-probe - flame - adapter atomiser, 3B7
with use of ultrasonic nebulisation, 3B13
by kinetic - spectroph. method, 4B112
stripping voltamm., 6B150
in air-borne dust, by n.a.a., 2H5
in biol. materials, by a.a.s., 3D8
by n.a.a., 4B111, 4D5
fluorim., 5F9
X-ray emission spectrom., 6D13
in biol. materials in protein-bound form, by gel filtration - n.a.a., 3D11
in biol. tissues, by g.l.c., 2F5
in copper, anodic-stripping voltamm., 1B31
in copper or copper salts, by g.l.c., 5B46
in dental enamel, by n.a.a., 3D21
in environmental materials, by g.c., 2A1*C*
in feeding-stuffs, by a.a.s., 4G7
in foods, by g.l.c., 2F5

Selenium, determination—*continued*
in Ge - Se - Te alloys, gravim., 6B126
in industrial materials, by X-ray fluorescence analysis, 4B17
in ion-exchange resins, by a.a.s., 5B142
in metallurgical materials, by a.a.s., 2A1*C*, 2B117
in minerals, ores or rocks, by a.a.s., 1B112
by n.a.a., 4B111
spectroph., 4B110
in plants, by g.l.c., 2F5
in presence of Sb, anodic-stripping voltamm., 5B146
of As, automated potentiom., 2B97
of Te, in mixed-solvent media, 6B163
in sediments, *in situ* X-ray emission spectrom., 6H25
in semiconductor alloys, stripping voltamm., 6B162
in soil, by n.a.a., 6G4
in steel, by g.l.c., 4B150
in tin, by n.a.a., 5B124
in urine, by n.a.a., 4D6
in water, by a.a.s., comparison of methods for, 3H29
of Se^{IV} and Se^{VI} in presence of each other, ion-exchange chrom. - volum., 5B160
of Te in, fluorim., 6B165
spectroph., 6B166
purification, and detmn. of contaminants removed from, 3B122
sepn. from Au and Te, paper chrom. or electrochrom., 6B164
from Sn, by solvent extraction, 6B130
solvent extraction of, with *O*-isopropyl ethylthiocarbamate, 2B3
with metal dithiocarbamates, 5B1
Selenium, reagent for, naphthalene-2,3-diamine, 4B110, 5F9
Selenium alloys, Se - Ge - Te, detmn. of Cd, Cu, Pb and Te in, stripping voltamm., and of base elements in, gravim., 6B126
Selenium - bromine compounds, detection, Raman spectrom., 3B123
Selenosulphate, detmn. in presence of selenourea and SO_3^{2-}, iodim., 2B115
Semicarbazide, detmn., potentiom., 3C82
—, **thio-,** detmn., volum., 6A9
Semiconducting materials, analysis of films of, by ion-beam etching - a.a.s., 1B49
detmn. of Sb, Bi, Pb and Te in, by luminescence method, 2B18
of Ga in, oscillopolarogr., 3B64
of In in, by a.a.s., 6B75
of Pb and Te in Pb - Te - Sn alloy, by luminescence method, 2B118
of S in sulphides, gravim., 5B159
Seminal fluid, detmn. of E and 19-hydroxy-E prostaglandins in plasma of, by g.l.c., 4D40
Senega root, sepn., identn. and detmn. of saponins in, by t.l.c. - fluorim., 3E13
Separation processes, see also under headings such as *Distillation*; *Filtration*; etc.
cellular and foamed plastics as media for, 4A17
report of symposium on, 2A5
Serine, detmn., enzymic - spectroph., 3D1
sepn. from asparagine, aspartic acid, glutamic acids, glutamine and glycine, by t.l.c., 3D97
Serotonin, see *Tryptamine, 5-hydroxy-*
Sesame seeds, detection of saponins in, and in sweetmeat made from, by t.l.c., 2F24
identn. of inositol hexaphosphate in, 5G3
Sewage, analysis of org. compounds in effluents, review, 4H42
Sewage—*continued*
automatic flow samplers for, 5A4*C*
detmn. of ATP in activated sludge, by bi luminescence method, 5H45
of B in, spectroph., 3H19
of Cd, Cu, Pb and Zn in, or in effluent, anodi stripping voltamm., 1H29
of org. compounds in effluents, review, 5H40
of phenols in effluents, by g.l.c. of trimethy silyl deriv., 6H44
extraction of Hg and methylmercury from, wit use of dithizone-treated polyurethan foam 1H31
identn. of penta- and tetra-bromotoluene sludge, by g.l.c. - m.s., 3H48
Shales, characterisation of oil-, by laser-induce pyrolysis, 2A1*C*
detmn. of org. H in oil-, by low-temp. ashing gravim., 4C55
Shea-fat, detection in cacao butter or chocola fat, colour reaction for, 3F51
Shellfish, see also *Mussels*
detmn. of B in, spectroph., 6F3
of Bunker C fuel oil in, liquid chrom. - g.l.c 4F10
of Cr, Ag and Zn in, comparison of metho for, 3D10
of Hg in, by a.a.s., 5B81
Shells, detmn. of Cd, Cu and Pb in, by a.a.s., 3B
Sialic acid, see *Neuraminic acid, N-acetyl-*
Sieves, method for assessing quality of, 5A7*C*
ultrasonic cleaner for, 4J1
Silane, tetrabromo-, g.l.c. study of, 1B5
Silanes, detmn. of Si - Si bond in perphenylate oligo-, gasom. - g.s.c., 1C15
—, **alkoxychloro-,** g.l.c. study of, 3C28
—, **alkylchloro-,** g.l.c. study of, 6C37
Silanols, sepn., identn. and detmn., by t.l.c., 5C26
Silica, analysis of thin insulating layers based o with use of Castaing - Slodzian ionic analyse 2B162
detmn. in phosphoric acid, spectroph., B.S.I method for, 5B136
in tobacco, gravim., B.S.I. method for, 2D18
of Al, Fe, Ti and V in, spectroph., 6B117
of O deficit in, by kinetic method or spectroph 5B117
of transition elements in fibres of high-purity spectrogr., 3B172
Silicates, see also *Minerals, ores and rocks, silicate*
analysis, fusion and dissolution of samples in 1B1
detmn., by indirect a.a.s., 5B22
of Cu in, by ion exchange - a.a.s., 6B120
of elements in, X-ray emission spectrom. spectrum-fitting technique for, 3J57
of elements in powdered, X-ray emissio spectrom., effect of particle size on result in, 6B119
of P in, spectroph., 6B121
of K in, potentiom., ion-sensitive electrode fo 3J82
of Sn in, by a.a.s., 1B84
of Zr in, spectroph., 6B139
Silicon, detmn., by a.a.s., 2B75, 3J59
with atomisation on tantalum carbide 6B113
by n.a.a., 5J107
in air-borne dust, by X-ray fluorescenc analysis, absorption correction for, 5H2
in AMS alloy, 1B18
in bauxite, by n.a.a., 4B50
in biol. materials, by n.a.a. - Cerenkov count ing, 2D7

n, determination—*continued*
n cement raw-mix slurries, by n.a.a., system for, 2J151*P*
n copper ores, by n.a.a., 5B43
n feldspar, emission spectrom., with ion-beam excitation, 4J44
n ferrophosphorus, spectroph., 5B193
n HF soln. containing Ta, spectroph., 4B128
n inclusions in iron, by electrolysis - spectrogr., 5B191
n iron, emission spectrom., 4B145
n iron alloys, gravim., 2B141
n Fe - B - C alloys, spectrogr., 6B205
n iron ore, X-ray emission spectrom., 6B208
n magnesite, spectrogr., 5B63
n minerals, ores or rocks, by n.a.a., 5B118
n plants, spectrogr., 5D1
n presence of W, amperom., 1B149
n rice plants, spectroph., 1G1
n silicates, with electron micro-probe, 4B66
n slag, X-ray emission spectrom., 6B208
n steel, by m.s., 4B144
by n.a.a., 3B153
emission spectrom., 2B142, 4B145
spectroph., 5B197
with ion micro-probe, 2J111
X-ray emission spectrom., detection limits in, 5B195
n tungsten or tungsten compounds, comparison of methods for, 4B125
n water, 6H29 .
of As, B and P distribution in, by n.a.a., 6B115
of B distribution in, by n.a.a., 5A5*C*
of B distribution in diffusion or epitaxial layers of, spectrogr., 6B116
of O adsorbed on surfaces of, by laser sampling - m.s., 5B8
of P in, by n.a.a., 1B83
of P in thin layers of, by radioactivation analysis, 4B65
eparation of ion-implanted thin films of, for ransmission electron microscopy, 6B114
n, organic compounds of, characterisation, by g.l.c., 6C38
tmn. of amino-N in, coulom., 5C25
of purity of, cryosc., 4C27
of Si-bonded vinyl groups in, colorim., 2C10
of Si–H and Si–vinyl groups in, bromim., 4C5
n alloys, analysis of AMS, scheme for, 1B18
tmn. of Ba and Sr in, by n.a.a., 4B34
i - Cr, detmn. of composition and thickness of ilms of, X-ray emission spectrom., 5B119
i - Fe, detmn. of Al, Ca, Mn and Ti in, by a.a.s., 4B146
of elements in, X-ray spectrom., 4B142
n carbide, detmn. of N distribution in, by charged-particle activation, 5B116
n nitride, analysis of thin insulating layers based on, with use of Castaing - Slodzian ionic analyser, 2B162
n tetrafluoride, detmn. in air, by g.c., 3B131
anes, see also *Cyclosiloxane derivatives*
alysis of oligo-organo-, by g.l.c., 3C90
n., identn. and detmn., by t.l.c., 5C26
r, concn., flotation method for, 1B36
ection, micro-crystallogr., 3A5
ection and detmn. in aluminium alloys, flame emission spectrom., 3B63
tmn., a.c. amperom., 1B8
anodic-stripping voltamm., 1B34, 2B13
by a.a.s., 2J86, 6B39
automated, 2J85
electrolytic pre-concn. method for, 6B8
extraction method for, 3B11

Silver, determination by a.a.s. —*continued*
influence of line profiles on analytical curves for, 5B38
with absorption tube having nebulisation chamber, 6B38
with use of micro-probe - flame - adapter atomiser, 3B7
with use of micro-sampling cup system, 1B15
by catalytic - ring-oven method, 4B6
by ion exchange - X-ray photo-electron spectrom., 5B15
complexom., 4B10
iodim., indirect, 2B11
potentiom., 4B8
with silver - silver sulphide electrode, 1B10
spectroph., 2B12, 2B35, 3B43, 3B44, 5B7
comparison of dyes for, 6B40
prediction of conditions for, 5B53
with use of solid reagent, 2B34
stripping chronopotentiom., 5B11
X-ray emission spectrom., pre-concn. method for, 3B15
in air-borne dust, by n.a.a., 2H5
emission spectrom., 4H4
in alkali-metal halide single crystals, spectroph., 5B29
in aluminium, by a.a.s., 5A5*C*
in biol. materials, by a.a.s., 3D8
emission spectrom., 2D9
in biol. tissues, by a.a.s., 2D8
in cadmium, spectroph., 1B48
in calcareous rocks, spectroph., background correction for, 5B64
in coins, by n.a.a., 6B44
in copper, by n.a.a., 5B52
in gold, spectroph., 4B31
in industrial materials, by X-ray fluorescence analysis, 4B17
in liver tissue, by a.a.s., 6D3
in marine organisms, comparison of methods for, 3D10
in minerals, ores or rocks, by a.a.s., 4B12
by cupellation - a.a.s., 5B57
by n.a.a., 6B41
reference standard for, 5B209
in nickel alloys, ion-exchange chrom. - a.a.s., 6B218
in petroleum or petroleum products, by a.f.s., 5B5
in presence of other elements, spectroph., 3B45
in skin, spectrogr., 4D2
in tin, by n.a.a., 5B124
in water, by a.a.s., 5H21
by n.a.a., 2H16
potentiom., with ion-sensitive electrode, 6H30
spectrogr., 1H24
of Sb, Bi and Te in, stripping voltamm., 6B43
of distribution of, in copper, by ion bombardment - a.a.s., 2B31
of impurities in, by n.a.a., 6B42
of metallic and sol. Ag^+, in silver iodide, by kinetic method, 5B54
paper-chrom. study of, in butanol - HCl media, 6B30
sepn. from Ba (or Pb) and Hg, by ion exchange, 5B20
from Bi, Co, Pb, Hg or Ni, paper electroph., 3B5
from Cd, Co, Hg and Sn, by solvent extraction, 2B37
from Cu, by solvent extraction, 5B45
from Hg, by solvent extraction, 6B67

Silver, separation—*continued*
from other elements, by solvent extraction, 2B3
solvent extraction of, with bis-(2-ethylhexyl) phosphorodithioate, 1B35
with esters of dithiocarbamic acids, 4B2
with *O*-isopropyl ethylthiocarbamate, 2B3
with metal dithiocarbamates, 5B1
with 1,1′-methylenebis-(4-ethyl-3,5-dipropylpyrazole), 2B36
with quaternary ammonium nitrates, 6B1
with triphenylmethane dyes, 3B44
sorption of, on sulphides from acid soln., 4B3
Silver, reagents for, Brilliant green, 2B34
p-dimethylaminobenzylidenerhodanine, 5B53
dithizone, 3B45, 4B31
ethyl violet, 6B40
malachite green, 3B44
1,10-phenanthroline - 3,4,5,6-tetrahydroxy-9-(2,3,4,5-tetrachloro-6-methoxycarbonyl)-phenyl)xanthylium, 2B12
1,10-phenanthroline - thiothenoyltrifluoroacetone, 3B43
Rhodamine B ethyl ester, 5B7
Se analogues of azolidines, 5B2
thiothenoyltrifluoroacetone, 2B35
Silver complexes, with picolinaldehyde thiosemicarbazone, 5B16
Silver iodide, detmn. of metallic Ag and sol. I^- and Ag^+ in, by kinetic methods, 5B54
Silver salts, detmn. in aq. soln., by β-ray backscattering, 5B18
Silver sulphide, detmn. of S in semiconductor, gravim., 5B159
Sinters, detmn. of elements in, X-ray spectrom., 4B142
β-Sitosterol, identn. in blood serum, by g.l.c. - m.s. of trimethylsilyl deriv., 3D85
Skins, detmn. of acid and salt contents of pickled, 3C91
of elements in human, spectrogr., 4D2
Slag, detmn. of Al and Zr in, by n.a.a., 3B99
of Ca, Fe and Si in, X-ray emission spectrom., 6B208
of elements in, by a.a.s., 3J59
of F in, photom., 4B126
of Ge in, by flotation - photom., 6B122
of H and N in, spectrogr., 5B134
of Mn in, complexom., 2B146
of P in different chemical forms in lime - alumina, spectroph., 5B65
of ^{35}S and total S in, with use of single proportional counter, 4B107
Smoke, see *Tobacco smoke*
Soapwort, see Saponaria
Soaps, bibliographies, 2F54, 2F60
Sodium, detection, by t.l.c., 2B23
detmn., by a.e.s., with use of heated-graphite atomiser, 2B10
by n.a.a., 5J107
by n.m.r., 2B29
flame photom., procedure for correlating emission with concn. in, 2A12
potentiom., 3B28
reduction of interference due to ion leaching from electrode for, 6J70
temp. effects in use of ion-sensitive electrode for, 6J71
in air-borne dust, by n.a.a., 2H5
in alkali-metal or barium halides, by m.s., 3B29
in aluminium oxide, potentiom., with ion-sensitive electrode, 5B89
in biol. materials, by a.a.s., 3D8
in blood of oceanic fish, flame emission spectroph., 4D8
Sodium, determination—*continued*
in blood serum, by a.a.s., 2D6
ion-exchange chrom., 5J17
in copper ores, by n.a.a., 5B43
in corundum, by n.a.a., 4B49
in cryolite, by ion exchange - volum., 1B58
in feldspar, emission spectrom., with ion-bean excitation, 4J44
in hair, by a.a.s., 6D4
in hornblende, X-ray emission spectrom., 3J5
in lysimeter water from soil, potentiom., with ion-sensitive electrode, 3G7
in materials for ferrite production, by n.a.a., 3B147
in minerals, ores or rocks, by n.a.a., 4B22
in org. solvents, flame photom., 1C4
in petroleum or petroleum products, by a.a.s., 1C57
flame emission spectroph., 6C65
in phosphates, potentiom., with ion-sensitive electrode, 5B140
in plants, direct-reading emission spectrom., 2D5
standards for, 2D4
in refractory materials, flame spectrom., 1B17
in sediments, by a.a.s., 6H26
in silicates, with electron micro-probe, 4B66
in steel, by electrolysis - flame photom., 2B14
in tin, by n.a.a., 5B124
spectrogr., 6B131
in urine, by n.a.a., 4D6
ion-exchange chrom., 5J17
in water, 6H29
by n.a.a., 2H16
in zeolites, flame spectroph., 3B174
of Ba, Ca, Mg and Sr in, by a.a.s., 5B31
of impurities in, spectrogr., 2B30
of S in, spectroph., 5B32
Sodium carbonate, detmn. in plasticiser-plant effluents, potentiom., 5H44
Sodium chloride, detmn., potentiom., 2B7
in aq. soln. containing other chlorides, by capillary-tube sepn. in electric field, 6B3
in Elkinton soln., volum., 3E49
of ClO_3^- in, polarogr., 4B131
of Co in, by kinetic - thermom. method, 5B20
of Au in, by a.a.s. or spectrogr., collection in soya-bean curd for, 3H18
of impurities in, by a.a.s., with electrolytic pre-concn., 6B8
by m.s., 3B29
of I^- in commercial iodised, spectroph., 1B12
of Mg in, spectroph., 1B40
of Ni in, by chemiluminescence method, 5B30
of SO_4^{2-} in, volum., indicator for, 2B113
drying and weighing of, 5A11
field-desorption m.s. study of, 3B8
flame absorption spectra of, 6J58
Sodium dihydrogen phosphate, detmn. of impurities in, by a.a.s., with electrolytic pre-concn., 6B
Sodium fluoride, detmn. of F in industrial-grade, volum., B.S.I. method for, 3B30
Sodium hydroxide, detmn., potentiom., 2B7
Sodium iodide, analysis of particles in single crystals of, laser - spectrogr., 3B31
detmn., by thermom. titration, 4C25
Sodium nitrate, field-desorption m.s. study of, 3B
measurement of refractive index of fused, 1J62
Sodium nitrite, detmn., volum., 2B90
Sodium polysulphides, detmn. of composition of mixtures of, potentiom., with S^{2-}-sensitive electrode, 2B111
Sodium sulphate, field-desorption study of, 3B8

m sulphide, detmn. in black liquor, review of continuous methods for, 2C69
of CO_3^{2-}, S^{2-} and $S_2O_3^{2-}$ in, spectroph., 6B24
m sulphite, detmn. in pulping liquors, polarogr., 3C71
m tetraborate decahydrate, preparation of standard, 6A11
m tetrahydroborate, detmn. of sulphurated, volum., 4A9
m thiosulphate, detmn. in pulping liquors, polarogr., 3C71
see also *Humus*
termn. of As in, by isotope dilution, 1G8
of As and Se in, by n.a.a., 6G4
of atrazine and hydroxyatrazine in, by g.l.c. of methyl deriv., 1G14
of B in, spectroph., 3G8
of Bromfenvinfos and Polfos in, by g.l.c., 6G11
of calcite and dolomite in, deriv. thermogravim., 5A6*C*
of carbofuran in, by g.l.c. of sulphonate deriv., 1G20
of Cu in, by a.a.s., 1G4
of 2,4-D, dicamba and mecoprop in, by g.l.c. of methyl esters, 4G22
of dicloran, hexachlorobenzene and quintozene residues in, by g.l.c., 2G23
of dinoterb in, by g.l.c. of methyl ether, 5G28
of elements in, by a.a.s., comparison of extractants for, 3G6
with direct introduction of powdered sample into flame, 5B217
by n.a.a., sampling for, 2J149
of exchangeable bases and exchange capacity of, automatic leaching apparatus for, 2G1
of fenuron in, by alkylation - g.l.c., 2G33
of F^- in, colorim., 2G6
of heavy metals in, by radioactivation analysis, 2A4*C*
of I^- in, by kinetic - spectroph. methods, 5G7
of I in, semi-automated spectroph., 1G2
of Fe in, spectroph., 4G3
of Hg in, by a.a.s., 1G5, 5G6
emission spectrom., 5B80
evolution and collection method for, 4G2
of nitrate-N in, potentiom., with ion-sensitive electrode, 3G9
of N in org. form in, by dye-binding method, 1G9
of organochlorine pesticides in, by g.l.c., photochem. induced artefact in, 5G31
of pesticides in, sampling and extraction methods for, 3G28
of PO_4^{3-} in, automated spectroph., 1G6
of P in, causes for variations in results of, 1G7
of P in extracts of, continuous-flow spectroph., 5G2
of P and S in, solubilisation for, 3G10
of Pu in, review, and methods for, 6H35
of pollutants in, sampling and sample preparation for, 2G2
of K or Na in lysimeter water from, potentiom., with ion-sensitive electrode, 3G7
of $S_4O_6^{2-}$ and $S_2O_3^{2-}$ in, spectroph., 3G11
of thiofanox and its metabolites in, by g.l.c., 5G36
of U in, by ion exchange - α-counting, 2G5
aluation of translocation behaviour of agrochemicals in, by t.l.c., 2G3
traction of amino-acids from, with use of superheated water, 3G12
***naceae* spp.**, detmn. of alkaloids in, by g.l.c. or spectroph., 4E15
Solanidine, sepn. from other potato glycoalkaloids, by g.l.c. of permethyl deriv., 1G3
α-Solanine, sepn. from other potato glycoalkaloids, by g.l.c. of permethyl deriv., 1G3
Solvent extraction, analytical applications of three-phase systems for, 1B11
automatic apparatus for, 4J5
modified Soxhlet-type apparatus for high-pressure, 1J4
Solvents, organic, analysis of mixtures of, by liquid chrom. - g.l.c., 2C82
detmn. of K and Na in, flame photom., 1C4
of H_2O in, conductim., with anthracene - sodium reagent, 4C3
plasticisers as contaminants of, 2D1
Soot, analysis, thermogravim., 5A6*C*
sepn. and detmn. of heterocyclic and polycyclic compounds in, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
Sorbic acid, detmn. in foods, u.v. spectroph., 3F19
in fruit, fruit products or wine, colorim., or u.v. spectroph., g.l.c. analysis of substances interfering in, 5F58
in wine, u.v. spectroph., 1F20
Sorbitol, detmn. of Pb in, stripping voltamm., 6F4
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
sepn. from other polyols, by t.l.c. or paper chrom., 3C11
Sorbitol dehydrogenase, see under *Enzymes, specific*
Sorbohydroxamic acid, as analytical reagent, 6A8
Soup, detemn. of acaricides in miso, by g.l.c. of trifluoroacetyl esters, 3G38
of Cd in tomato, by a.a.s., 4F3
of Cd, Cu and Pb in dried, inverse voltamm., 3F2
of glutamic acid in dried, ion-exchange chrom. - potentiom., 3F17
Soursop, see Anona muricata
Soya beans, detmn. of elements in, by n.a.a., 5G1
of lipids in blends with ground beef of, comparison of methods for, 1F11
of oil, protein and H_2O in, near-i.r. reflectance spectroph., 3G5
of protein of, in meat - soya blends, gel electroph., 5F26
of trypsin inhibitors in textured proteins of, semi-automated spectroph., 1F12
identn. of inositol hexaphosphate in, 5G3
sepn. of lipids of, by h.p.l.c., 5F65
Soya-bean oil, detmn. of *N*-nitroso-compounds in, by g.c., 4F6
identn. of flavour compounds developed during storage of deodorised hydrogenated, by g.l.c. - i.r. spectroph. - m.s., 3F47
Spectrometry, Auger-electron, heavy-ion-induced, 2J75
of fracture surfaces in irradiated stainless steel, 2A1*C*
sample preparation for, 2J76
scanning, 2A1*C*
scanning instrument for, 2J73
use of 'Auger parameter' for identn. of chemical species, 2J74
Spectrometry, electron spin resonance, apparatus for, suitable for optically detected magnetic resonance measurements, 5J71
use of modified furnace controller for regulation of cooling system for, 5J71
application of discrete Fourier transform to spectral data in, 2J109
by modulated dynamic nuclear resonance, 1J53

Spectrometry, electron spin resonance—*continued*
cell for study of electrochemically generated org. free radicals, 1J58
X-band superhet system for, 2J108
Spectrometry, gamma-ray, effect of chemical form of radionuclides on shape of spectra in, 1B101
least-squares resolution of spectra on PDP-11 computer, 5A5*C*
'two-area method' for spectral evaluation in, 5J106
Spectrometry, ion-scattering, high-energy, 2A1*C*
programming of apparatus for, for elemental profiling, 1J64
SORBAS apparatus for use in, 6J45
surface analysis by, 2A1*C*
with commercial Auger cylindrical-mirror analyser, 4J42
Spectrometry, mass, see *Mass spectrometry*
Spectrometry, microwave, 6A22*B*
time-domain Fabry - Perot instrument for, 1J43
X-band superhet system for, 2J108
Spectrometry, molecular-emission, application of MECA technique for, 2A1*C*
Spectrometry, nuclear magnetic resonance, apparatus for, conversion of A-60 instruments to Fourier-transform operation, 2J107
micro-computer interface for pulsed, 2J105
applications of, in biochemistry, 6D71*B*
by modulated dynamic nuclear polarisation, 1J53
calibration of thermom. standards for, 3J72
^{13}C, applications of, in studies of reaction kinetics, 2A1*C*
quantitative intensity measurements in, 2A1*C*
reviews, 1J57, 2A1*C*
use of Fourier-transform methods in, 2A1*C*
use of shift agents in, 2A1*C*
computerised analysis of overlapping spectral lines in, 5J66
computerised interpretation of spectra in, 2J106
device for improvement of recovery time in single-coil pulsed instruments, 5J68
device for rapid manipulation of frequencies in, 2J104
field-frequency lock monitor for signal averaging in high-resolution, 1J55
flow-call for in-probe electrolysis in, 1J56
^{14}N, reference compounds for, 5J67
org. structure elucidation by, 2A1*C*
Q-meter detectors for, 1J54
rapid-mixing cells for, 5J65
software correction for phase-sensitive detector misalignments in pulsed, 5J69
Spectrometry, photo-acoustic, 2A1*C*
review, 1J65
Spectrometry, photo-electron, ultra-violet, analytical applications of, 6J46
—, **X-ray,** applications of, 6J40
in study of inorg. solids, review, 6J44
detmn. of trace metals in aq. soln. by, 5B15
elemental sensitivities of metals in, 6J39
for surface analysis, 2A1*C*
principles, instrumentation and applications of, review, 6J43
review, 2J77
sample preparation for, 2J76
Spectrometry, Raman, advances in, 3J80*B*
analysis of discrete fine particles by, 4J55
apparatus for, computer conversion of sine-drive instrument to linear-wavenumber drive, 4J56
applications of, in surface chemistry and catalysis, 2A1*C*
of tunable dye lasers in, 2J81
automated, photon-counting technique for, 2J78
Spectrometry, Raman—*continued*
cell and furnace for, for studies of corrosive melt at temp. >1000°, 1J42
cells for, for studies of liquids under pressures o 1 to 3000 bars, 2J79
rotating, permitting addition of sample an standard soln., 4J54
cryostat and temp. controller for, 5J47
floating optical mount for use in, 5J38
table for evaluation of characteristic bands i spectra of org. compounds, with use of i.r. data 2C2
universal rotating system for, 4J53
Spectrophotometry, absorption, apparatus for, com parison of linearity and accuracy of, 5J56
differential amplifier for scale expansion of 5J55
double-beam wavelength-modulation, fo simult. measurement of spectra and thei logarithmic deriv., 5J54
dual-wavelength stopped-flow, for use wit turbid samples, 5J53
for low-temp. studies, 1J50
for study of air-sensitive systems and transient in enzyme reactions, 3J66, 3J67
for use in centrifugal chemical analyser, 3J65*A*
automatic pipetting system for, 3J5
precision instrument allowing simult. measure ments of transmission and reflectance, 5J59
signal-processing instrument for dual-wave length/split-beam, 2J93
time-sharing instrument for alternative use a reflectometer or fluorimeter, 1J32
use of filters for calibration of, 6J59
computer acquisition of spectra in dual-wave length/split-beam, 2J94
cryostat for single-crystal, 5J58
deriv. technique for, 2J92
factors affecting precision in, 2J95
index of spectra, 6J67*B*
KBr-disc technique for, 3J69
predicted variance of multi-component metho of analysis by, 1J49
u.v. and visible spectra, 3J79*B*
—, **infra-red,** advances in, 3J80*B*
apparatus for, detmn. of wavelength-scale repeat abilities in computerised Fourier-transform 5J63
double-beam high-resolution Fourier, 2J102
glove-box - sample-compartment cover fo Fourier-transform, 2J101
modified a.t.r. attachment for, 2J100
multi-spectrum Hadamard-transform, 5J64
non-dispersive gas analyser using flow-sensitive detector and with unbalanced operation 3J70*P*
portable variable-path-length gas analyser, fo use in setting-up of gas-phase reactor, 2A1*C*
applications of, in forensic analysis, 2A1*C*
in surface chemistry and catalysis, 2A1*C*
automated analysis by, 2A1*C*
beam projector for use in Fourier-transform tech nique for, 5J62
compound identn. by, with use of similarity measures, 6J61
evaluation of curve fitting in, 6J60
hygroscopic properties of KBr used in, 2J98
cell for, variable-path-length, 5J60
control of dispersion error in, 5J61
industrial applications of Fourier-transform, 2A1*C*
method for growing single-crystal specimens of org. substances for, 2J99
new developments in vibrational, 2A1*C*

trophotometry, infra-red—*continued*
ptical constants of plastics materials for, 1J51
esentation of data in, 6J62
obability discriminant functions for classifying binary data in, 2J103
uantitative ultra-fine oil mulling for, 2A1*C*
solution and stray light in, 2J97
ble for evaluation of characteristic bands in spectra of org. compounds, with use of Raman data, 2C2
chnique for recording exclusive spectra of adsorbed substances, 3J71
se of Plexiglas transmission filter for far-i.r. region, 1J52
ultra-violet, analysis of cryogenic soln. by, 5J57
pparatus for, differential amplifier for scale expansion of, 5J55
comparison of linearity and accuracy of, 5J56
use of filters for calibration of, 6J59
dex of spectra, 6J67*B*
trophotometry, atomic-absorption, adsorption of samples on carbon fibres for, 3J52*P*
nalysis of high-solids samples by, 2A1*C*
of small-vol. samples by, 6J54
pparatus for, computerised, for simult. multi-element analysis, 2A1*C*
for analysis of α-radioactive materials, 2B67
modified monochromator permitting dual-channel operation of, 3J62
two-flame automated recording, 1J46
pplications of, in metallurgical analysis, 3B6
of heated vaporisation, in micro-analysis, 2A1*C*
of tunable dye lasers in, 2J81
tomisation in, carbon-filament device for, 2J88
comparison of single- and triple-shot air - acetylene burners for, 2J86
graphite capsule - flame device for, for analysis of solids, 3J59
graphite-tube device for, 5D2, 6J57
hollow-T carbon device for, 4D4
review, 5J49
tantalum-strip device for, 5H21
wire-loop device for, 6J55
with N_2O - acetylene flame for minimisation of interferences in micro-sampling-cup method for, 2A1*C*, 3J60
with use of micro-probe - flame adapter, 3B7
utomated extraction method for, 2J85
ehaviour of solid samples in furnaces for, 2A1*C*
y direct introduction of powdered sample into flame, 5B217
ompared with a.f.s. for analysis of powdered samples with flameless atomiser, 6J51
with polarography for heavy-metal detmn., 5A3*C*
omparison of peak-height and integration methods for measuring absorption in graphite-furnace technique for, 2J89, 2J90
oncn. procedure for use in, 2B14
etmn. of less-volatile metals by, 2A1*C*
iscrete sampler for flame technique for, 6J53
lectrolytic pre-treatment of sample soln. for, 6B8
lements and matrices in, 4J61*B*
ntegrator for, 5J51
for measurement of transient signals in, 2J87
nterference by alkali-metal halides in, 1J47
nagnetic-tape data-treatment system for, 6J58
ptimisation of instrumental parameters in flame-less, 6J56
rinciples of, and interferences in, 2J84
elative sensitivity of direct air - acetylene flame detmn. of trace elements by, 5B6
eview, and comparison with a.e.s. and a.f.s. of, 4J57

Spectrophotometry, atomic-absorption—*continued*
sample injector for, 5J50
simplex optimisation of experimental factors in, 5J48
sources for, improved method for making electrodeless-discharge lamps as, 3J58
spectral interferences in, 5J52
temp. control and background correction in flameless, 2A1*C*
ultrasonic nebulisation in, 3J61, 5H22
use of separated flame as resonance detector in, 4J58
with use of graphite furnace and matrix modification, 2A1*C*
Zeeman methods for, 3J63, 3J64
Spectrophotometry, atomic-emission, see under *Spectroscopy, emission*
Spectrophotometry, atomic-fluorescence, adsorption of samples on carbon fibres for, 3J52*P*
apparatus for, computer-controlled, rapid-scan, for multi-element analyses, 2A1*C*, 5B5
modified monochromator permitting dual-channel operation of, 3J62
with Eimac continuum excitation source and graphite-filament atomiser, 4J59
applications of tunable dye lasers in, 2J81
compared with a.a.s. for analysis of powdered samples with flameless atomiser, 6J51
discrete sampler for flame technique for, 6J53
non-flame, non-dispersive, 2A1*C*
principles of, 2J84
review, and comparison with a.a.s. and a.e.s. of, 4J57
sources for, exploding wires as, 2A1*C*, 2J83
improved method for making electrodeless-discharge lamps as, 3J58
use of separated flame as resonance detector in, 4J58
Spectrophotometry, multiple-internal-reflection, conversion of i.r. spectrophotometer for, 2J100
Spectrophotometry, reflectance, apparatus for, precision instrument allowing simult. measurements of transmission and reflectance, 5J59
Spectroscopy, analytical atomic, 4J60*B*
review, 1J67*B*
applications of charge-coupled devices in, 2A7*C*
of image dissectors in, 2A7*C*
of multi-element detectors in vacuum-u.v., 2A7*C*
of photodiode arrays in, 2A7*C*
of tunable lasers in, review, 6J33
of vidicon instruments in atomic and molecular, 2A7*C*
automated calibration of scanning monochromator for, 6J34
comparison of signal-to-noise ratios of instruments for, 5J40
description of reduced-temp. flames used in, 2J80
detector for ions and metastable ions for use in, 1J31
detmn. of elements by, 4B175*B*
device for detmn. of current gains of photomultipliers for, 6J35
evaluation of photomultiplier tubes for use in photon-counting correlation, 1J30
glass filters as standard reference materials for, 6J68*B*
handbook, 2J129*B*
i.r. Fourier instrument, for laboratory and astronomical purposes, 4J48
interference in flame methods for, 2A1*C*
limitations of magnetic de-focusing technique for photomultipliers for, 2J56
modified monochromator for, 5J39

Spectroscopy—*continued*
noise spectra from sheathed and unsheathed air - acetylene flames used in, 1J45
noise-to-signal ratio monitor for detmn. of noise in d.c. signals, 2J57
one-dimensional photon-counting detector array for use at extreme-u.v. and soft-X-ray wavelengths, 2J51
phase-sensitive detection for recovery of signals buried in 'noise', 2J55
polarisation interferom. Fourier-transform system for, for use in u.v., visible and near-i.r. regions, 4J47
report of conference on, 2A1
solid-state detection in rapid-scanning, 2A7*C*
superheterodyne analyser and acoustic-optic modulator for use in high-resolution, 2J52
synchronised rapid-scanning vacuum-u.v. instrument for, 2J91
system for on-line data reduction in, 1J48
TV-type multi-channel detectors for, 2J49, 2J50
use of Fourier-transform technique in atomic, review, 2J82
Spectroscopy, emission, 6A22*B*
air cooling of electrodes in, 6B13
apparatus for, with use of laser excitation, 1J37
applications of graphite powder standards in d.c. arc technique for, 6J47
automatic filter-positioner device for, 1J38
calibration in, 2A1*C*
carbon-cup method for, 6B7
changes in self-absorption in, 1J39
effect of electrode shape on vacuum cup method for, 2A1*C*
excitation in, by ion-beam sputtering, 4J44
comparison of performance characteristics of inductively coupled r.f. and capacitively coupled microwave plasmas for, 5J46
reviews of plasma sources for, 2J69, 2J70
rotating arc-plasma jet for, 6J48
spark discharge system for, 1J35
with exploding foils, 6B16
with inductively coupled plasma, 2A1*C*
simult. multi-element analysis by, 4J45
flame techniques for, adsorption of samples on carbon fibres for, 3J52*P*
anion detmn. by inhibition effects in, 2A1*C*
applications of tunable dye lasers in, 2J81
automatic background correction for trace analysis by, 2A1*C*
coherence in flame noise signals in, 2A1*C*
discrete sampler for, 6J53
elements and matrices in, 4J61*B*
procedure for correlating emission with concn. in, 2A12
with use of Fourier-transform technique, review, 2J82
with use of ultrasonic nebulisation, 1J44
in NH_3 atmosphere, 5J44
integrated-intensity method for, 2J72
micro-sampling technique for, 2A1*C*
preparation of standards for, by rapid crystallisation of fused salts, 5J45
principles and methods of, 2J130*B*
review of atomic, and comparison of with a.a.s. and a.f.s. 4J57
semi-automated device for controlled atmospheres in, 4J46
spatial differentiation of optical emission in Q-switched-laser-induced plasmas, 2J71
use of separated flame as resonance detector in, 4J58
with use of heated-graphite atomiser, 2B10
Spectroscopy, emission—*continued*
—, **X-ray,** analysis of aq. soln. by, without use of standards, 4J40
apparatus for, computer-coupled, 2A1*C*
cryostat unit and holder for Philips 1410 instrument, 2J61
applications of, in energy programmes, 2A7*C*
computer program based on relative residual scattering for use in, 2J62
computer program for analysis of powdered technological products by, 4B17
computer program for correction for inter-element effects in, 4B143
concn. procedure for use in, 2B14
detection limits in, 2J60
diluent effects in, 1B14
effect of particle size on results of analyses of powdered samples, 6B119
effects of short-wave background radiation in, 3J56
energy-dispersive, applications of, 3A1*C*
on scanning electron microscope, 4J38
on transmission electron microscope, 4J39
review, 3J53
specimen-holder for use in, 1J34
spectrum-fitting technique for analysis of oxides and silicates by, 3J57
trace-element techniques for, 2A1*C*
excitation in, with use of 7·5-MeV nitrogen ion, 3B9
with use of protons, 2B8, 6J41
with use of protons or α-particles, 1J33
flow cell for, 3J55*P*
high-sensitivity, thin-sample method with use of proton exctiation for, 1B6
inter-element effects in, 2B20
Monte Carlo simulation of photon-excited X-ray fluorescence in homogeneous samples, 2J63, 6J42
of trace elements in org. matrices, review, 1C5
pre-concn. of trace metals on modified silica gels for, 3B15
preparation of reference standards for analysis of powders by, 5J42
preparation of standard targets for, 3J54
report of symposium on, 5A5
shield for minimising exposure of operator to scattered X-radiation, 4J37
use of effective mass-absorption coeff. in analysis with polychromatic radiation, 2J64
Spermidine, detmn., potentiom., enzyme electrode for, 5J97
in biol. tissues, by t.l.c. - fluorim., 2D87
in presence of putrescine and spermine, by h.p.l.c., 3D88
sepn. from other amines, and detmn. in urine, by t.l.c. of dansyl deriv., 3D86
Spermine, detmn. in biol. tissues, by t.l.c. - fluorim., 2D87
in presence of putrescine and spermidine, by h.p.l.c., 3D88
sepn. from other amines, and detmn. in urine, by t.l.c. of dansyl deriv., 3D86
Sphalerite, detmn. of Fe in, by laser sampling - emission spectrom., 5B75
of Zn in, anodic-stripping voltamm., with use of mineral-paste electrode, 5B68
Sphingomyelin, detmn. of lecithin - sphingomyelin ratio in amniotic fluid, paper chrom., 6D45
Spices, detmn. of residual solvents in oleoresins of, by g.c., 4F23
Spinach, detection of carbamate pesticides in, by t.l.c., clean-up method for, 6F24
Squalene, identn. and detmn. in fats, by g.l.c. of trimethylsilyl deriv., 5F64

oxin, detmn. in fish tissues or water, by g.l.c. of methyl deriv. or spectroph., 3D52
k gases, detmn. of ^{14}C and ^{3}H in reactor, 1A1*C*
of CO, NO, SO_2 and opacity in, with in-stack dispersive spectrometer, 5H3
of I in, potentiom., with I^--sensitive electrode, 2H14
of N oxides in, potentiom., with NO_3^--sensitive electrode, 2H10
of SO_2 and total reducible S in kraft and sulphite, u.v. spectroph., 5H7
of SO_2 in oil-combustion, indirect, 5H10
pn. and detmn. of S compounds in kraft furnace, by g.l.c., 5H8
nane, tetramethyl-, sepn. from other organometallic compounds, by g.l.c., 6C36
nite, detmn. in tin ores, with kesterite, volum., 1B88
ch, detmn., spectroph., 6C79
in plants, spectroph., 4D34
of damaged, in flour, review, 2F25
entn. of maize, in illicit tablets, i.r. spectroph., 4E7
istics, digital data-smoothing with use of Chebyshev polynomials, 2A11
ric acid, analysis of volatile pyrolysis products of, by g.s.c., 2D63
etmn., liquid chrom., chromogenic reagent for, 4C21
in blood serum, by g.l.c., 6D40
rylamine, detection and detmn. of bound, in polyamide, German official method for, 4F11
l, analysis, applications of a.a.s. in, 3B6
new types of standard for use in, 1B141
etmn. of alloying and impurity elements in, by a.e.s., 2A1*C*
of Al in, by n.a.a., 5B192
spectroph., 5B88
of As in, spectroph., comparison of methods for, 1B152
of Bi in, by a.a.s., 3B154
of B in, automated spectroph., 1B147
of Ca in, by electrolysis - flame photom., 2B140
spectrogr., 1B146
of 'C distribution in, by proton activation, 2B143
of Ce in, amperom., 1B148
of Cr in, by a.a.s., 1B156
colorim., 4B151
comparison of methods for, 1B145
spectrogr., 1B154
spectroph., 5B161
X-ray emission spectrom., 6B208
of Cr in layers plated on, spectrogr., 1B155
of Co in, spectroph., 2B79, 5B204
of elements in, by a.a.s., 3B148
by m.s., 4B144
emission spectrom., 1B144, 4B145
background correction in, 2B142
spectrogr., accuracy of Quantometer technique for, 1B143
with laser evaporation of material, 1B142
with ion micro-probe, 2J111, 3B149
X-ray emission spectrom., detection limits in, 5B195
with proton excitation, 3B150
of FeS in, by electrolysis - reduction - conductim., 1B157
of lanthanoids in, X-ray emission spectrom., 3B151
of La in, spectroph., 3B152
of Pb in, by a.a.s., 2B144
X-ray spectrom., use of briquetted samples for, 1B151

Steel, determination—*continued*
of Li in, by electrolysis - flame photom., 2B140
of Mg in, spectrogr., 1B146
of Mn in, comparison of methods for, 1B145
X-ray emission spectrom., 5B218
of MnS in, as S, 1B157
of metallic phases and slag inclusions in, with electron-probe, comparison of correction programs and spectrometers for, 6B200
of Mo in, paper chrom. - spectroph., 6B177
spectroph., 3B156
comparison of reagents for, 5B199
of Ni in, gravim., 5B205
X-ray emission spectrom., 6B208
of Nb in, emission spectrom., interference by Mn in, 3B155
volum., 4B149
of N in, by g.s.c., 3B20
by Kjeldahl distillation - coulom., 4B83
polarogr., 6B203
of N in different chemical forms in, automated spectroph., 1B147
of O in, by g.s.c., 3B20
by reductive fusion - coulom., 1B153
of P in, comparison of methods for, 1B145
X-ray spectrom., evaluation methods in, 2B145
of K in, by electrolysis - flame photom., 2B140
of Se in, by g.l.c., 4B150
of Si in, by n.a.a., 3B153
spectroph., 5B197
of Na in, by electrolysis - flame photom., 2B140
of S in, by isotope-dilution m.s., 6B219
of ^{35}S and total S in, with use of single proportional counter, 4B107
of Sn in, spectroph., 1B150
of Ti in, by a.a.s., 4B148
spectroph., 2B85, 4B147
of W in, spectroph., 5B172, 6B182
of V in, spectroph., 1B106, 5B150, 5B198
sepn. of Cu from, by solvent extraction, 6B29
surface analysis, review, 6B199
—, **corrosion products of,** detmn. of elements in, X-ray spectrogr., 2B139
—, **inclusions in,** analysis, by laser vaporisation - spectrogr., 5B196
—, **stainless,** Auger-electron-spectrom. study of fracture surfaces in irradiated, 2A1*C*
detmn. of B, Cr, Fe, Mn and Ni in, by n.a.a., 6B202
of Nb in, spectroph., 3B116
of N in, by He fusion - g.s.c., and of O in, by vacuum fusion - i.r. spectroph., 6B204
Sterigmatocystin, detmn., by t.l.c., with use of 'grey scale', 2F19
Steroids, analysis, by g.c., 2A6*C*
improved g.c. apparatus for, 3D75
report of symposium on, 4A1
of prostate-tissue, by t.l.c. - g.c. of trimethylsilyl deriv. - m.s., 4D47
of urinary, improved liquid-chrom. apparatus for, 3D75
detection, by t.l.c., spray reagent for, 2D80
detection and detmn. of 1,4-dien-3-oxo-group-containing, fluorim., 1E19
detmn. in pharmaceutical preparations, complexom., 1E18
of metabolites of, in urine, by g.c., 6A1*C*
of secondary-OH-group-containing, by g.l.c. of heptafluorobutyryl deriv., 3D78
in effluents, 4A4*C*
ion-exchange paper-chrom. study of, and of glucosiduronic acids and their esters derived from, 1D53

Steroids—*continued*
paper-chrom. study of glucosiduronic acids, 2D82
report of congress on hormonal, 2A3
sepn., by g.c., derivatisation for, review, 5J27
of blood-plasma, liquid chrom., 1D54
of sex hormones, by t.l.c., 1J18
t.l.c. and h.p.l.c. studies of synthetic, 6E35
— **oximes,** detmn. in pharmaceutical preparations, by h.p.l.c., 3E44
Steroids, adrenal, see *Corticosteroids*
—, **aza-,** t.l.c. study of, 6E36
—, **hydroxy-,** identn., by g.l.c. - m.s., new silylating agents for, 6D47
—, **oxo-,** detmn., by g.l.c., deriv.-forming reagent for, 3D77, 5D58
—, **17-oxo-,** detmn. in urine, by g.l.c., 3D76
liquid chrom., 3J14
—, **20-oxo-,** detmn., enzymic - spectroph., 3D1
in urine, enzymic, 3D82
Sterols, detmn. in lipid mixtures, by h.p.l.c., 5F65
in unsaponifiable fraction of fats, enzymic - spectroph., 2D79
identn., by g.l.c., 2D81
identn. and detmn. in fats, by g.l.c. of trimethylsilyl deriv., 5F64
Stibine, trimethyl-, sepn. from other organometallic compounds, by g.l.c., 6C36
—, **triphenyl-,** detmn., iodim., 1C45
Stigmasterol, identn. in blood serum, by g.l.c. - m.s. of trimethylsilyl deriv., 3D85
Stilboestrol, detmn. in milk, by t.l.c., 3F25
in molasses-based liquid feed supplements, by g.l.c. of trimethylsilyl ether, 2G16
Strawberries, detmn. of folpet on, indirect polarogr., 1G18
Strontium, detection, by colour reaction applied to single ion-exchange-resin grain, 1B4
detmn., by a.a.s., 2J86
by thermom. titration, 6B5
colorim. or complexom., effect of presence of Na acetate and $NaClO_4$ in, 1B41
complexom., indicator for, 6B60
potentiom., ion-sensitive electrode for, 1J71
spectroph., 5B61
in air, radiochem., 1A1*C*
in alkali-metal or barium halides, by m.s., 3B29
in biol. materials, by a.a.s., 3D8
in hexaferrites, X-ray spectrogr., 2B138
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in minerals, ores or rocks, spectrogr., 2J72
in petroleum or petroleum products, flame emission spectroph., 6C65
in plants, by a.a.s., 6J54
direct-reading emission spectrom., 2D5
in refractory materials, flame spectrom., 1B178
in sediments, by a.a.s., 6H26
in situ X-ray emission spectrom., 6H25
in silicates, by a.a.s., 4B68
X-ray emission spectrom., 4B67
in silicon alloys, by n.a.a., 4B34
in sodium, by a.a.s., 5B31
in strontium compounds, 6B61
in water, 6H29
by n.a.a., 2H16
X-ray fluorescence spectrom., concn. methods for, 2H19
sepn. from Ba and K or from Ca, paper chrom., 3B3
from Ca, ion-exchange chrom., 2J17
from La, ion-exchange chrom., 2B5
solvent extraction of, with nitrobenzene in presence of H_3AsO_4 - catechol complex, 6B27
Strontium, reagents for, 2,7-bisazo-deriv. of chromotropic acid, 5B61
metalphthalein, 1B41
Se analogues of azolidines, 5B2
Strontium compounds, detmn. of Ba, Ca and Sr in, 6B61
Strontium fluoride, detmn. of rare-earth metals in, spectrogr., 6B59
Strychnine, comparison of reagents for pptn. of, 5E8
detection and detmn. in illicit diamorphine samples, by t.l.c. and spectroph., 6E5
detmn., fluorim., 5E7
in crude drugs, by TAS technique, 2E8
in grain baits, by g.l.c., 4G42
by h.p.l.c., 4G41
identn., by t.l.c., 3E4
sepn. from atropine, emetine and hyoscine, paper chrom., 2E4
***Strychnos* alkaloids,** sepn., by h.p.l.c., 2E9
Styphnate, see *Resorcinol, 2,4,6-trinitro-*
Styrene, detection and detmn. of monomeric, in aq. polymer emulsions, by g.c., 3C75
detmn. in butadiene - styrene latices, Raman spectrom., 2A1*C*
in expanded polystyrene, by g.l.c., 6C89
in waste water, by g.c., 1H47
polarogr., 6H53
—, **dimethyl-,** detmn. in waste water, polarogr., 6H53
—, **methyl-,** detmn. in waste water, polarogr., 6H53
Subtilisin, see under *Enzymes, specific*
Succinate dehydrogenase, see under *Enzymes, specific*
Succinic acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
in muscle tissue, by g.l.c. of methyl ester, 2D67
in presence of citric, fumaric and malic acids, paper chrom. - photom., 1D42
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
sepn. from other citric-acid-cycle acids, liquid chrom., 1D41
— **anhydride,** detmn., volum., indicator for use in morpholine method for, 6C26
Succinic acid, sulpho-, di-iso-octyl ester sodium salt, detmn. of di-iso-octyl fumarate and maleate in, polarogr., 5C15
Sucrase, see *Enzymes, specific, β*-fructofuranosidase
Sucrose, detmn. in presence of other carbohydrates, by t.l.c. - densitom., 3C13
in sugar products, enzymic, 6F7
in wine, by h.p.l.c., 5F57
of added, in sweetened cereal products, automated enzymic - colorim., 3F7
identn. in pharmaceutical preparations, by t.l.c., 1E50
identn. and detmn. in Chinese gooseberry fruit, by g.l.c. of trimethylsilyl deriv., paper chrom. or t.l.c., 2F31
in tropical fruit products, by t.l.c. - g.l.c. of trimethylsilyl deriv., 5F34
sepn. from other carbohydrates, liquid chrom., 1D41
Sugar (*commercial*), analysis, enzymic methods for, 6F7
detmn. of surface moisture on, by Karl Fischer method, 5F17
particle size analysis and evaluation of, 5F19
report of commission on uniform methods of analysis of, 2F51*B*
Sugar juices, detmn. of pectin fragments in, by spectroph. detmn. of uronic acids content, 6F8
Sugar products, analysis, enzymic methods for, 6F7

r-beet, detemn. of Hg in dried pulp of, collaborative study of, 5G12
of thiofanox and its metabolites in, by g.l.c., 5G36
rs, see under *Carbohydrates*
hacetamide, detmn., volum., 5E42
of migration rate of, and of arenesulphonates of, 6E33
odium, detmn. in pharmaceutical preparations, with its degradation product, by h.p.l.c., 1E42
hadiazine, detmn., volum., 5E42
in biol. materials, by t.l.c. - fluorim., 1D27
hadimethoxine, detmn. of migration rate of, and of arenesulphonates of, 6E33
haguanidine, detmn., by thermom. titration, 3E41
volum., 5E42
hamethazine, detmn. in biol. tissues, by h.p.l.c., 5D32
hamethoxazole, detmn. in pharmaceutical preparations containing trimethoprim, by g.l.c. of methyl deriv., 5E43
hamethoxypyridazine, detmn. of migration rate of, and of arenesulphonates of, 6E33
hamethylthiazole, detmn. in pharmaceutical preparations, by t.l.c. - densitom., 3E42
hamic acid, drying and weighing of, 5A11
hanilamide, detmn., by thermom. titration, 2E41, 3E41
volum., 5E42
in pharmaceutical preparations, by t.l.c. - densitom., 3E42
in sulphacetamide sodium preparations, by h.p.l.c., 1E42
of migration rate of, and of arenesulphonates of, 6E33
hapyridine, detmn., volum., 5E42
hasalazine, detmn. in pharmaceutical preparations, by h.p.l.c., 4E39
hate, detmn., by spectroph. titration, 4J4
indirect complexom., with use of ultrasonic treatment, 6B158
molecular-emission-cavity spectrom., 2B114
potentiom., 6B159
volum., indicators for, 2B113
in air, review, and improved $BaCl_2$ method for, 3H11
in beer or water, turbidim., with use of haze meter, 3F30
in presence of PO_4^{3-}, potentiom., with Pb^{2+}-sensitive electrode, 6B160
of S^{2-}, with electron micro-probe, 2J66
of SO_3^{2-} or $S_2O_3^{2-}$, molecular-emission-cavity spectroph., 5B158
in radioactive-waste supernate, laser - Raman spectrom., 4H37
in sea-water, polarogr., 6H49
in surfactants, gravim. or iodim., German standard methods for, 1C62
in urine, by a.a.s., 2D21
in water, automated, 2A4*C*
by indirect a.a.s., 6H38
indirect spectroph., 4H27
in water or waste water, automated spectroph., 2H34
epn. from CO_3^{2-} and Cl^-, ion-exchange chrom., 5J17
olvent extraction of, 6B161
hate-sulphur, detmn. in phosphate fertilisers, by a.e.s., 5G11
hathiazole, detmn., spectroph., 2E42
volum., 5E42
hide, detmn., by oxidation - potentiom., 6B159
molecular-emission-cavity spectrom., 2B114
pulse polarogr., 2B110
Sulphide, determination—*continued*
in presence of SO_4^{2-}, with electron micro-probe, 2J66
in pulping liquors, polarogr., 3C71
in pulps from flotation of Cu - Zn ores, 6B37
in sodium sulphide, spectroph., 6B24
in water, spectroph., 2A4*C*
of S isotopes in, by m.s., preparation of SO_2 for, 2B108
Sulphides, organic, response of flame ionisation detector to, 6C31
sepn. from aromatic hydrocarbons, liquid chrom., 1C56
—, **alkyl,** g.l.c. data for, and for O-analogues of, 2C1
g.l.c. study of, 3C26
—, **2-aminoethyl 3-aminopropyl,** see *Cystathione*
—, **bis-(4-nitrophenyl),** detmn. of amine impurities in, potentiom., 1C43
—, **dimethyl,** detmn. in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
by g.l.c., 5H8
Sulphinic acid esters, response of flame ionisation detector to, 6C31
Sulphite, detmn., molecular-emission-cavity spectrom., 2B114
in flue gases, iodim., 5H9
in presence of alkali or $S_2O_3^{-}$, potentiom., 4B109
of $SSeO_3^{2-}$ and selenourea, iodim., 2B115
of SO_4^{2-}, molecular-emission-cavity spectroph., 5B158
Sulphonamides, detmn., by thermom. titration, 2E41, 3E41
potentiom., in binary solvent mixtures, 1E41
in pharmaceutical preparations, by t.l.c. - densitom., 3E42
of migration rates of, and of arenesulphonates of, 6E33
of primary, by g.l.c. of *N*-dimethylaminomethylene deriv., 6A1*C*
sepn., by t.l.c., 1J18
u.v.-spectroph. study of, 4E8
Sulphones, detmn. in air, sorbents for, 1H14
responses of flame ionisation detector to, 6C31
—, **4-aminodiphenyl,** identn. and detmn. in dapsone, by h.p.l.c. - fluorim., 2E43
—, **2,4′-diaminodiphenyl,** identn. and detmn. in dapsone, by h.p.l.c. - fluorim., 2E43
Sulphonic acids, sepn., by t.l.c., 1J18
— **esters,** detmn. in air, sorbents for, 1H14
response of flame ionisation detector to, 6C31
Sulphonium ion, trimethyl-, iodide, field-desorption m.s. study of, 2C4
Sulphoxonium ion, trimethyl-, iodide, field-desorption m.s. study of, 2C4
Sulphur, see also *Sulphate-sulphur*
detection in h.p.l.c. effluents, 6A1*C*
detmn. in air-borne dust, flame photom., 6H11
by X-ray fluorescence analysis, absorption correction for, 5H2
in AMS alloy, gasom., 1B18
in *S*-benzyl-protected cysteine peptides, bromatim., 5D74
in boron carbide, X-ray spectrom., 4B42
in carbon, X-ray spectrom., 4B42
in Cu - Fe - S systems, X-ray spectrom., 2B20
in igneous rocks, by combustion - u.v. spectroph., 3B119
in iron, emission spectrom., 4B145
in nickel alloys, by isotope-dilution m.s., 6B219
in org. compounds, see under *Organic elementary analysis*
in petroleum or petroleum products, by capture-γ-ray analysis, 6A3*C*

Sulphur, determination in petroleum—*continued*
X-ray emission spectrom., 6B208
in plants, by O-flask combustion - turbidim., 4D12
standards for, 2D4
in sebacate-based lubricants, gravim. or spectroph., 2C63
in semiconductor sulphides, gravim., 5B159
in sodium, spectroph., 5B32
in soil, turbidim., solubilisation for, 3G10
in steel, by isotope-dilution m.s., 6B219
emission spectrom., 2B142, 4B145
in water, 6H29
of impurity, in org. compounds, volum., combustion method for, 5C5
of isotopes of, in sulphides, by m.s., preparation of SO_2 for, 2B108
of org., in coal, with electron micro-probe, 5C46
of specific activity of ^{35}S in aq. soln., with use of SO_4^{2-}-sensitive electrode, 2B109
of ^{35}S and of total, in metallurgical samples, with use of single proportional counter, 4B107
Sulphur compounds, detection and detmn. in rape-seed oil, by g.l.c. - t.l.c., 2F8
detmn. of SO_2 and total reducible, in emissions from kraft and sulphite stacks, u.v. spectroph., 5H7
g.l.c. data for heterocyclic, and for their O-analogues, 2C1
g.l.c. study of, 3C26
isolation and identn. of org., in cracked naphtha, by g.c. - m.s., 2C57
sepn., by g.c., derivatisation for, review, 5J27
Sulphur dioxide, detmn. in air, coulom., 1H11
radiom., 1H12
review, 3H1
in brewing materials, review of automated and semi-automated methods for, 4F28
in emissions from kraft pulp mills, by g.c., comparison of detectors for, 2H12
by g.l.c., 5H8
u.v. spectroph., 5H7
in emissions from oil-combustion sources, indirect, 5H10
in environmental materials, by g.c., review, 2H1
in flue gases, iodim., 5H9
in gas mixtures, by g.c., 4J30
deriv. spectroph., 2J92
in power-plant emissions, 3A1*C*
in stack gases, with in-stack dispersive spectrometer, 5H3
in wine, potentiom., with SO_2-selective electrode, 3F37
g.c. sensitivity coeff. of, 5B157
g.l.c. study of, 3C26
losses from Ribena during storage, 1F25
Sulphur hexafluoride, B.S.I. specifications for, for use in electrical equipment, 3B120
detmn. in air, by g.c., 1H13
by m.s., 6H13
in blood, by g.s.c., 1D33
Sulphur trioxide, detmn. in fuming sulphuric acid, potentiom., 4B108
of products of sulphonation of maleic anhydride, potentiom., 6C34
Sulphuric acid, detmn. in >88% acid or oleum, thermom., nomograph for, 1B110
in nitration acid for TNT production, liquid chrom., 1C83
in presence of fluorenecarboxylic acid and HNO_3, by h.f. titration, 6C55
of atmospheric aerosol of, photom., 6H12
of SO_3 in, potentiom., 4B108
Sulphuric acid—*continued*
solvent extraction of, with tributyl phosphate from alcohol or acetone soln., 1B76
— **esters, alkyl, sodium salts,** detmn., by two-phase titration, 5E48
— —, **dodecyl, sodium salt,** detmn., enzymic - spectroph., 2C65
spectroph., 2D122
Sulphurous acid, 2-(4-t-butylphenoxy)cyclohexyl prop-2-ynyl ester, see *Omite*
Sulthiame, detmn. in blood plasma, by methylation - g.l.c., 5D19
Suncide, see *Propoxur*
Sunflowers, detmn. of 4-aminopyridine in seeds or plants of, by g.l.c., 2G32
Sunflower-seed oil, detmn. of amide- or amine-N in, by acidic extraction - Kjeldahl method, 3F50
Superoxide dismutase, see under *Enzymes, specific*
Suprofen, analytical data for, 5E39
Surface analysis, by α-particle and Li^+ back-scattering, 5A5*C*
comparison of methods for, 2A1*C*
ESCA methods for, 2A1*C*
instrumental techniques for, 3J50, 3J51
ion-scattering spectrom., 2A1*C*
methods for, 6A23*B*
Surface area, detmn., by physical adsorption, review, 1J111
of powders, detmn., by three-point BET method not requiring use of high vacuum, 6J77
Surfactants, analysis, review, 3C60
of org., German standard methods for, 1C62, 3C61, 6C71
bibliographies, 2F43, 5F60
detmn., amperom. or nephelom., 5C47
enzymic - spectroph., 2C65
of As in formulations of, by a.a.s., 3F5
of carboxymethylcellulose in Tim and Perlan formulations, spectroph., 4C61
of citrate in products containing, enzymic - spectroph., 3C64
—, **anionic,** detmn. in industrial wastes, by two-phase titration, 4H47
in water, by a.a.s. or spectroph., 4H31
by two-phase titration, 2H43, 3H42
colorim., ion-exchange clean-up method for, 3H43
—, **cationic,** detmn., by two-phase titration, and review, 6C73
fluorim., 4C59
potentiom., with Ca^{2+}-sensitive electrode, 6C72
in industrial wastes, by two-phase titration, 4H47
retention of amine-type, by ion exchangers, 2H44
—, **non-ionic,** analysis of mixtures of, by g.l.c. - t.l.c. - spectroph., 4C57
Curie-point pyrolysis - g.c. study of, 4C77
detmn., biamperom. or potentiom., 4C58
by t.l.c., 2H45
of mol.-wt. distribution of polyoxyethylene deriv., by g.l.c., 1C63
explosion hazard from mixtures with oxidising acids of, 4A22
Surinam cherry, see under Eugenia *spp.*

T

2,4,5-T, detmn., by g.l.c. of 2-chloroethyl ester, 5G26
TH 6040, see *Urea,* 1-(4-*chlorophenyl*)-3-(2,6-*difluorobenzoyl*)-
TNT, see *Toluene,* 2,4,6-*trinitro-*
Talinolol, detmn. in blood, faeces or urine, spectroph., 5D27

oil, analysis of fatty acids and resin acids in, by g.l.c. of methyl esters, 2H46
alum, detmn., by a.a.s., equilibrium effects in, 3B118
polarogr., 4B103
spectroph., 1B108, 2B17, 6B156
in lanthanum or lanthanum oxide, spectrogr., 1B65
in niobium, photom., 4B104
in zirconium(IV) oxide, spectrogr., 1B99
of C in, by high-temp. oxidation, 5B113
of Nb in, by ion exchange - spectroph., 1B109
of N in, by Kjeldahl distillation - coulom., 4B83
of O in, comparison of methods for, 5B155
on. from Pb, ion-exchange chrom., 6B134
from Nb, rare-earth metals, Th and U, by solvent extraction, 6B157
vent extraction of, with amine oxides, 3B80
with amines, 5B153
with esters of dithiocarbamic acids, 4B2
with O-containing solvents from aq. HF media, 4B102
alum, reagents for, 8-hydroxy-7-iodoquinoline-5-sulphonic acid, 1B108
hydroxyquinoline-5-sulphonic acid, 6B156
nus green, 4B104
licylbisfluorone, 2B17
alum(V) fluoride, detmn., potentiom., in anhyd. HF media, 4B16
alum silicide, d.t.a. of, 5A6*C*
azole, detection in biol. tissues, by t.l.c., 1F13
analysis of polycyclic hydrocarbons in, 2A7*C*
aric acid, detection and detmn. in baking powder, by g.l.c. of trimethylsilyl deriv., 2F33
tmn., by chemiluminescence method, 5E4
in presence of HCl or HNO_3, potentiom., 3A8
on. from other citric-acid-cycle acids, liquid chrom., 1D41
rate, detmn. in copper-plating soln., with use of Dohrmann DC-50 total-org.-C analyser, 2B33
detection of carbamate pesticides in green, by t.l.c., clean-up method for, 6F24
tmn. of caffeine in, gel chrom., 4F27
netium, detmn. in uranium compounds, 2A7*C*
in water, in presence of Nb, Te and Zr, sepn. scheme for, 6B21
of radiochemical purity of ^{99m}Tc-containing pharmaceutical products, by t.l.c., paper chrom., paper electroph. or γ-spectrom., 3E45
pn. from other elements, by g.s.c., 3B83
by solvent extraction, 3B141
of different oxidation states of, paper chrom., 6E40
lvent extraction of ^{99m}Tc, with tetraphenylarsonium ion from acid soln., 6B189
netium complex, of ^{99m}Tc with Sn and diethylenetriaminepenta-acetic acid, preparation and radiochemical purity of, 3B140
h, detmn. of F distribution in enamel of, by proton activation, 2J156
of Se in enamel of, by n.a.a., 3D21
rate, sepn. from IO_3^-, I^- and TeO_3^{2-}, liquid chrom., 6B170
rite, sepn. from IO_3^-, I^- and TeO_4^{2-}, liquid chrom., 6B170
rium, detmn., anodic-stripping voltamm., 3B124, 6B150, 6B167
by a.a.s., 5J49
with use of micro-probe - flame - adapter atomiser, 3B7
by kinetic - spectroph. method, 4B112
spectroph., 5B7, 6B166

Tellurium, determination—*continued*
X-ray emission spectrom., diluent effects in, 1B14
in biol. materials, by a.a.s., 3D8
in copper, anodic-stripping voltamm., 1B31
in Ge - Se - Te alloys, gravim., 6B126
in industrial materials, by X-ray fluorescence analysis, 4B17
in ion-exchange resins, by a.a.s., 5B142
in minerals, ores or rocks, by a.a.s., 1B113
spectroph., 4B19
extraction - concn. for, 6B169
in presence of Sb, Bi and Pb, by luminescence method, 2B18
of Cd, stripping voltamm., 6B168
of Pb, by luminescence method, 2B118
of U in biol. or environmental materials, by n.a.a., 3D22
in selenium, fluorim., 6B165
in silver, stripping voltamm., 6B43
in water, in presence of Nb, Tc and Zr, sepn. scheme for, 6B21
of impurities in, spectrogr., 1B60
sepn. from Au and Se, paper chrom. or electrochrom., 6B164
from other elements, by g.s.c., 3B83
of Te^{IV} and Te^{VI} from IO_3^-, I^- and IO_4^-, by t.l.c., 6B187
solvent extraction of, with metal dithiocarbamates, 5B1
Tellurium, reagents for, bromopyrogallol red, 6B166
butylrhodamine B, 4B19
naphthylbismuthiol, 6B169
Rhodamine B ethyl ester, 5B7
2,4,4′-trihydroxybenzophenone, 6B165
Tellurium alloys, Te - Ge - Se, detmn. of Cd, Cu, Pb and Te in, stripping voltamm., and of base elements in, gravim., 6B126
Tellurium compounds, sepn. of different chemical forms of ^{131}I from neutron-irradiated, and from each other, by t.l.c., 6B187
Tellurium ores, detmn. of Bi, Ni, Pd, Pt and Te in, spectroph., 4B19
Temperature control, continuous-flow helium cryostat for spectroscopy, 1J29
cryostat for m.s. isotopic analysis of μl samples of inert gases, 6J4
cryostat for single-crystal spectroph. studies, 5J58
cryostat and controller for Raman spectroscopy, 5J47
Terbium, detmn., fluorim., 6B89
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in rare-earth concentrates, by n.a.a., 6B85
in scandium oxide, by luminescence method, 5B92
Terbium, reagents for, 3-methyl-1-phenylpyrazolin-5-one - tetraphenylborate, 6B89
3-methyl-1-tolylpyrazolin-5-one - tetraphenylborate, 6B89
Terbium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Terephthalic acid, detmn., spectroph., 2C41
identn., by m.s. or plasma chrom., 2C42
— **dimethyl ester,** detmn. in air, by g.l.c., 5H16
Terpenes, characterisation, by m.s. of solid deriv. of carbonyl compounds, 2C67
detection, by t.l.c., spray reagent for, 6C56
—, **mono-,** identn. in essential oils, by study of temp. variation of Kovats indices, 3C66
sepn. and identn., by g.l.c. - m.s., 4C46

Terphenyl derivatives, polychloro-, analysis of urinary metabolites of, by m.s., 4D32
Testosterone, detmn. in blood serum, by g.l.c. - m.s., 1D57
in urine, by g.l.c., 3D76
by t.l.c. of trimethylsilyl deriv. - fluorim., 3D81
— **propionate,** detmn. in pharmaceutical preparations, complexom., 1E18
— **sulphate,** review of chemistry of, 5D59
Tetracaine, see *Amethocaine*
Tetracene, see *Naphthacene*
Tetrachlorvinphos, sepn. from its metabolites and detection, by t.l.c., 4G34
Tetracycline, sepn. and detmn. of impurities in, by h.p.l.c., 3E21
by t.l.c. - fluorim. (or u.v. spectroph.), 5E23
by t.l.c. (or liquid chrom. or paper chrom.) - spectroph., 3E22
Tetracycline derivatives, detmn., fluorim., 4A2*C*
sepn. from other antibiotics and each other, and detmn. of impurities in, by h.p.l.c., 2E16
δ-Tetradecalactone, identn. and detmn. in ripening blue cheese, by g.l.c., 5F32
Tetrafluoroborate, detmn. in water, spectroph., 3H20
Tetrahydroborate, detmn., iodim., in dimethylformamide medium, 5B84
Tetrahydroxoaluminate, detmn. in radioactive-waste supernate, laser - Raman spectrom., 4H37
Tetraphosphate, detmn. in presence of other phosphates, gel chrom. - a.a.s., 4B90
Tetrathionate, detmn. in presence of other polythionates and $S_2O_3^{2-}$, by h.p.l.c. - fluorim., 2H35
of $S_2O_3^{2-}$ and $S_3O_6^{2-}$, spectroph., 1B111
in soil extracts, spectroph., 3G11
Tetryl, sepn. and detmn. of decomposition products of, by h.p.l.c., 6C97
Textiles, detection of firearm-discharge residues in blood-stained, fluorescence reaction for, 1D16
detmn. of elements in finishes for, X-ray spectrom., portable instrument for, 2C71
of formaldehyde in, spectroph., 1C69
of free and fixed formaldehyde in auxiliaries for, polarogr., 4C70
of N in, by H_2SO_4 oxidation - colorim., 3C73
identn. of natural dyes on old, by t.l.c., 4C67
i.r. methods in studies of, 2A1*C*
Thallium, concn., with use of three-phase extraction system, 1B11
detmn., a.c. amperom., 1B8
anodic-stripping voltamm., 2B13
at amalgamated copper rotating-disc electrode, 5B21
by isotope dilution, 3B69
by thermom. titration, 6B5
complexom., indicators for, 1B61, 6B79
iodim., 5B91
potentiom., ion-sensitive electrode for, 3B111
spectroph., 3B68, 4B53, 5B7, 6B80
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by a.a.s., 3D8
in cadmium, spectroph., 1B48
in copper alloys, inverse voltamm., 5B49
in minerals, ores or rocks, by a.a.s., 4B12
in presence of In or Pb, polarogr., 6B14
in silicates, fluorim., 5B120
in tin, spectrogr., 6B131
ion-exchange study of, 3B71
sepn. from Al, Ga and In, liquid chrom., 6B72
from Hg, by solvent extraction, 5B83, 6B67
from other elements, by g.s.c., 3B83
by t.l.c., 2B6
of Tl^{I} and Tl^{III}, by solvent extraction, 3B70
Thallium—*continued*
solvent extraction of, as chlorothallate(III) from isobutyl methyl ketone - hexane soln., 4B4
with aromatic hydrocarbons, tributyl phosphate and Amberlite LA-2, 3B70
with *O*-isopropyl ethylthiocarbamate, 2B3
with 1-(2-pyridylazo)-2-naphthol - ReO_4^-, 4B1
sorption of Tl^{III} on DEAE-cellulose from HCl - H_2O - org. solvent mixtures, 6B81
Thallium, reagents for, 6-(2-benzothiazolylazo)-5-bromo-*m*-cresol, 3B68
5-(1-benzylbenzimidazol-2-yl)-3-methyl-1-(4-nitrophenyl)formazan, 6B80
Brilliant cresyl blue, 4B53
Rhodamine B, 5B120
Rhodamine B ethyl ester, 5B7
Se analogues of azolidines, 5B2
Thallium complexes, with 5-ethylamino-2-(2-pyridylazo)-*p*-cresol or 5-diethylamino-2-(2-pyridylazo)phenol, 2B60
with *N*-phenylbenzohydroxamic acid, voltamm study of, 6B14
Thebaine, detmn., polarogr., 3E7
in presence of codeine, morphine, noscapine and papaverine, fluorim., 4E18
Theobromine, detmn. in presence of papaverine phenobarbitone and reserpine, photom., 5E10
Theophylline, detmn., oscillopolarogr., 4D67
Thermal analysis, applications of, in paper-mil laboratory, 6C80
report of conference on, 5A6, 5J114
review, 2J159
—, **differential,** apparatus for, and applications of 2J161
—, **gravimetric,** 1J91*B*
Thermometry, ageing effect in low-temp. capacitanc instrument for, 1J90
B.S.I. specifications for short-range mercury-in glass instruments for, 2J162
calibration of germanium instruments for, 1J88
calibration of platinum resistance instruments for from 2·5 to 14 K, 1J89
comparison of instruments for, 5J111
effect of pressure on e.m.f. of Chromel/Alume thermocouple, 5J113
Matsushita carbon-resistor instruments for, 5J11
Thiabendazole, detmn. in aq. suspension, colorim. 4G26
in citrus fruits, liquid chrom. - g.l.c., 3F20
on bananas or citrus fruits, by t.l.c. - fluorim. 2G25
sepn. from other fungicides, paper chrom., 3G25
1,2,4-Thiadiazole, 2-mercapto-5-methyl-, detmn. i cefazolin, by n.m.r., 4E23
Thiamine, detmn., fluorim., 1E25, 4D69
in foods, comparison of automated and manua methods for, 5F70
in presence of other vitamin B compounds, by t.l.c. - densitom., 2E23
in water, fluorim., 2A1*C*
recovery from Decalso ion exchanger of, 1F23
— **hydrochloride,** detmn., volum., 2E6
sepn. from other vitamin B compounds, by t.l.c. 2E22
Thioammeline, see 1,3,5-*Triazine,* 2,4-*diamino*-6-*mercapto*-
Thiamphenicol, detmn. in urine, with its metabolites by g.l.c. - m.s., 4D16
t.l.c. study of, 6E13
Thiazinamium methyl sulphate, detmn. in bloo plasma or urine, by g.l.c., 5D30
Thiocarlide, detection and detmn. in pharmaceutica preparations, methods for, 1E43

yanate, detmn., argentim., indicator for, 3B132
molecular-emission-cavity spectrom., 2B114
inox, detmn. in plants, soil or water, with its metabolites, by g.l.c., 5G36
t, detmn., pulse polarogr., 5C19
volum., 1C12, 1C13, 1C14, 2C26
in acetone or dimethylformamide medium, 5C18
n petroleum products, controlled-current coulom., 3C47
n pulping liquors, polarogr., 3C71
c. data for, and for O-analogues of, 2C1
c. study of, 3C26
ine, 2-methyl-, sepn. from toluidine blue O, by t.l.c., 4C66
entone sodium, polarogr. study of, 5E29
hen, detmn., by g.l.c., 2C30
n benzene, evaluation of standard method for, 4C29
n waste water, by g.l.c., 5H43
c. study of, 3C26
-chloro-, detmn. in waste water, by g.l.c., 5H43
5-dichloro-, detmn. in waste water, by g.l.c., 5H43
trahydro-, detmn. in natural gas, by g.l.c., 5C45
yran, tetrahydro-, derivatives, differentiation of *endo-* and *exo*-isomers of, by g.l.c., 1C44
idazine, detmn. in presence of its oxidation impurities, by h.p.l.c., 4E32
ulphate, detmn., molecular-emission-cavity spectrom., 2B114
spectroph., 2A14, 2B12
volum., fluorescent indicator for, 6B148
n flue gases, iodim., 5H9
n presence of polythionates, by h.p.l.c. - fluorim., 2H35
of SO_4^{2-}, molecular-emission-cavity spectroph., 5B158
of $S_3O_6^{2-}$ and $S_4O_6^{2-}$, spectroph., 1B111
n pulps from flotation of Cu - Zn ores, 6B37
n sodium sulphide, spectroph., 6B24
n soil extracts, spectroph., 3G11
ulphate sulphurtransferase, see under *Enzymes, specific*
m, detmn. in presence of zineb and ziram, or n Tuzet or Thiodyl formulations, i.r. spectroph., 2G24
ia, detmn. of U, Zn and Zr in, X-ray emission spectrom., 6B93
ium, detection in minerals, ores or rocks, with ^{232}Th decay products, γ-spectrom., 1B73
tmn., by thermom. titration, 6B5
complexom., 3B87
gravim.. 1B68
spectroph., 2B64
turbidim., 3B75
X-ray spectrogr., pellet techniques for, 2A1*C*
n plutonium, X-ray spectrom., 3B88
n presence of Cd, Co or Zn, concn. by co-pptn. for, 1B69
of Ce, with use of $NaIO_4$, 4B58
of F^-, Fe and lanthanoids, spectroph., 5B103
of La, amperom., 6B82
of Sc, complexom., 1B70
of Zr, photom., 6B92
n rare-earth concentrates, by n.a.a., 6B85
n water, by n.a.a., 2H16
traction from molten nitrate media, with copper(II) bis-(2-ethylhexyl) phosphate, 3B17
on. from Ce, Co, Fe and Ni, paper chrom., 6B1
from Pa, by selective sorption, 5B104
from Ta, by solvent extraction, 6B157
Thorium, separation—*continued*
from U, by selective sorption, 3B81
liquid chrom., 3B82
of Pa from neutron-irradiated, by solvent extraction, 6B94
of ^{227}Th from ^{227}Ac-series elements, by passage through impregnated filter-paper, 1B71
solvent extraction of, with amine oxides, 3B80
with β-diketones, 1B7
with *NN*-disubstituted amides, 6B17
with quaternary ammonium nitrates, 6B1
Thorium, reagents for, arsenazo III, 5B103
cetrimide - glycinecresol red, 2B64
hippuric acid, 1B68
morin, 6B92
succinamic acid deriv., 3B75
Thorium ores, detmn. of Fe in, spectroph., 2B134
Thorium uranium oxides, sepn. of radioisotopes produced by irradiation of, by g.s.c., 3B83
Threonine, sepn. from asparagine, aspartic acid, glutamic acid, glutamine and glycine, by t.l.c., 3D97
Thulium, detmn., spectrogr., effect of NaCl carrier in, 5B94
in alkaline-earth-metal fluorides, spectrogr., 6B59
in rare-earth concentrates, by n.a.a., 6B85
sepn. from Pr or Zr, by ion exchange, 4J13
Thulium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
Thymine, detmn., coulom., 2D137
Thymine derivatives, detmn., coulom., 2D137
***Thymus* spp.,** analysis of high-mol-wt. esters and ketones in, scheme for, 1D47
detmn. of triazine herbicides in, by t.l.c., 1G13
Thyroid hormones, sepn., by g.c., derivatisation for, review, 5J27
Thyroid tablets, detmn. of I in, spectroph., 4E25
Thyroid tissue, detmn. of ^{125}I in, 1A1*C*
Thyronine, 3,3′,5-tri-iodo-, detmn. of radiochemical purity of labelled, comparison of methods for, 6E41
of radiochemical purity and stability of preparations of ^{125}I-labelled, 4A1*C*
pharmacological significance of blood-serum content of, 4A1*C*
Thyronine derivatives, iodo-, sepn. from related compounds and from each other, ion-exchange chrom., 2D109
Thyroxine, detmn. in blood serum, by protein-binding method, 2D110
effect of fatty acids on results in, 6D65
of radiochemical purity of labelled, comparison of methods for, 6E41
of radiochemical purity and stability of preparations of ^{125}I-labelled, 4A1*C*
pharmacological significance of blood-serum content of, 4A1*C*
Timolol, detmn. in blood plasma or urine, by g.l.c. of heptafluorobutyryl deriv., 5D28
Tin, concn., by co-pptn. on $MnO(OH)_2$, 4B15
with use of three-phase extraction system, 1B11
detection of ^{113}Sn in indium-113*m*, by colour reaction or γ-spectrom., 6E40
detmn., by a.a.s., 2J86
by automated Schmidt technique, 3B16
with atomisation on tantalum carbide, 6B113
with use of micro-probe - flame - adapter atomiser, 3B7
with use of micro-sampling cup system, 1B15
by co-pptn. with $Zr(OH)_4$ - square-wave polarogr., 6B129

Tin, determination—*continued*
by radiom. titration, 6B127
by spectroph. titration, 1B85
coulom., 1B86
photom., 6B128
spectroph., 2B17
stripping chronopotentiom., 5B11
stripping voltamm., effect of Hg concn. in, 6B15
in air-borne dust, by a.a.s., 2H7
emission spectrom., 4H4
spectrogr., 1H3, 3H6
in alloys, photom., 1B87
in antimony, spectroph., 1B33
in biol. materials, by a.a.s., 3D8
in boron nitride, spectrogr., 5B86
in brass, spectroph., 1B32
in bronze, spectroph., 1B33
in cadmium sulphate, spectrogr., 5B78
in lead alloys, X-ray emission spectrom., 6B135
in minerals, ores or rocks, by KIO_3 method, effect of metal reducing agent in, 2B81
spectrogr., 6B13
spectroph., 4B74
X-ray spectrogr., 1B89
in presence of Sb and As, amperom. or biamperom., 2B82
of As, automated potentiom., 2B97
of Bi and Pb, oscillopolarogr., 2B83
in silicates, by a.a.s., 1B84
in steel, by m.s., 4B144
emission spectrom., 2B142
spectroph., 1B150
in 'tin-free' bronzes, spectroph., 3B41
in vanadium, spectrogr., 6B155
in water, spectrogr., 5H19
of Al, Ca, In, Fe, Mg, Na and Tl in, spectrogr., 6B131
of Bi in, spectroph., 2B103
of C in, by combustion - g.c., with use of heating by magnetic field, 5B152
of impurities in, by n.a.a., 5B124
of Ag in, spectroph., 3B45
of Sn^{II} and Sn^{IV} in galvanic baths, polarogr., 4B73
sepn. from Sb, As and Hg, paper electroph., 3B16
from Sb, In or Se, by solvent extraction, 6B130
from In, paper chrom., 6E40
from Pb, ion-exchange chrom., 6B134
from Hg, by solvent extraction, 6B67
from Hg and Ag, by solvent extraction, 2B37
from Pt-group metals, by solvent extraction, 5B210
from Ti, by t.l.c., 3B95
solvent extraction of, with bis-(2-ethylhexyl) phosphate, 5B123
—, **dimethyl-,** detmn., by t.l.c. - spectroph. or polarogr., 2C80
—, —, **chloride,** sepn. from other methyltin compounds, liquid chrom., 2C81
—, **dioctyl-, chloride,** sepn. from other octyltin compounds and $SnCl_4$, liquid chrom., 2C81
—, —, **compounds,** detection in alcoholic beverages, by a.a.s., 5F43
—, **methyl-,** detmn., by t.l.c. - spectroph., 2C80
—, —, **chloride,** sepn. from other methyltin compounds, liquid chrom., 2C81
—, **octyl-, chloride,** sepn. from other octyltin compounds and $SnCl_4$, liquid chrom., 2C81
—, **tetramethyl-,** detmn., by g.l.c., 2C80
—, **tetraoctyl-,** sepn. from other octyltin compounds and $SnCl_4$, liquid chrom., 2C81
—, **tributyl-, oxide,** detection in wood, by t.l.c., 3C70

Tin—*continued*
—, **trimethyl-,** detmn., by t.l.c. - spectroph. or polarogr., 2C80
—, —, **chloride,** sepn. from other methyltin compounds, liquid chrom., 2C81
—, **trioctyl-, chloride,** sepn. from other octyltin compounds and $SnCl_4$, liquid chrom., 2C81
Tin, organic compounds of, characterisation, by g.l.c., 6C38
detmn., deriv. pulse polarogr., 2C79
of Cd and Pb in, inverse voltamm., 4F12
Tin, reagents for, antipyrine - 4-(2,4-dihydroxyphenylazo)-3-hydroxynaphthalene-2-sulphonic acid, 6B128
Brilliant green - 3,5-dinitrocatechol, 4B74
9-(2-carboxyphenyl)-2,6,7-trihydroxyxanthen-3-one and its ethanediol ester, 2B17
gallein, 1B87
haematoxylin, 6E40
phenylfluorone, 1B150
propylfluorone, 1B33
quercetin, 3B41
Rhodamine 6Zh, 1B32
Se analogues of azolidines, 5B2
2,6,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
Tin alloys, see also *Bronze*
detmn. of Sb in, coulom., 1B86
of Cd in, spectroph., 2B49
—, **Sn - Cd,** detmn. of elements in, anodic-strippin voltamm., comparison of electro-dissolution c galvanic and thermal alloys in, 3B55
Tin(IV) bromide, g.l.c. study of, 1B5
Tin(IV) chloride, sepn. from octyltin compounds liquid chrom., 2C81
Tin ores, detmn. of Sn present as cassiterite an stannite - kesterite in, volum., 1B88
Tin oxide, detmn. of As and Zn in, X-ray spectrom 3B91
Tin salts, detmn. of Sb in, by chemiluminescenc method, 6B132
Titanium, detmn., by a.a.s., 3J59
photom., 1B92
polarogr., 2B86
potentiom., 3B129
spectroph., 1B13, 2B17, 2B85
in air-borne dust, by n.a.a., 2H5
spectrogr., 1H3
in aluminium, by a.a.s., 1B56
in aluminium alloys, spectroph., 4B147
in chrome ores or chromites, spectroph., 3B12
in corundum, by n.a.a., 4B49
in ferrosilicon alloys, by a.a.s., 4B146
in hornblende, X-ray emission spectrom., 3J5
in iron, by a.a.s., 4B148
in iron alloys, photom., 2B141
in lanthanum or lanthanum oxide, spectrogr. 1B65
in lead - zirconium titanate ceramics, spectroph. 6B237
in minerals, ores or rocks, polarogr., 2B135
spectroph., 5B126
X-ray emission spectrom., 5B218
in mussels, by m.s., 4F1
in presence of Al and Fe, complexom., 5B125
of Bi, potentiom., 2B100
of Cr and Zr, oscillopolarogr., 6B136
of other elements, by t.l.c. - spectroph., 3B9
of other metals, spectroph., 2B21
in sediments, spectrogr., 2H17
in silica, spectroph., 6B117
in silicates, with electron micro-probe, 4B66
X-ray emission spectrom., 4B67

um, determination—*continued*
steel, by a.a.s., 4B148
emission spectrom., 2B142, 4B145
spectroph., 4B147
with ion micro-probe, 2J111
TiO_2-based delustring agents in textiles, X-ray spectrom., 2C71
water, by n.a.a., 2H16
spectrogr., 5H19
f C in, by high-temp. oxidation, 5B113
f concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
f H in, by g.s.c., 3B20
spectrogr., 6B137
f impurities in, spectrogr., 4B80
f metallic, in titanium carbide or nitride, spectroph., 4B81
n. from Cd and Zn, chrom., 5B127
rom Fe, by solvent extraction, 1B136
rom Hg, by solvent extraction, 6B67
rom V, by solvent extraction, 5B151
ion-exchange chrom., 3B4
vent extraction of, with bis-(2-ethylhexyl) hydrogen phosphate, 1B93
vith 2-bromobutyric acid, 4B79
vith esters of dithiocarbamic acids, 4B2
um, reagents for, 9-(2-carboxyphenyl)-2,6,7-rihydroxyxanthen-3-one ethanediol ester, 2B17
ntipyrinylmethane, 1B92
O_2, 2B141, 4B81, 6B237
ethoxy-*N*-*m*-tolylbenzohydroxamic acid, 1B13
phenylbenzohydroxamic acid - phenylfluorone, B126
phenylcinnamohydroxamic acid, 4B147
cylbisfluorone, 2B17
phosalicylic acid, 3B95
N⁻, 6B117
romin, 2B85
on, 2B21, 3B128
,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
ium alloys, detmn. of H in, spectrogr., 6B137
f Zr in, spectroph., 3B98
i - Al, phase analysis, and electrochem. dissolution of, 5B19
ium(IV) bromide, g.l.c. study of, 1B5
ium carbide, detmn. of B, C, N and O in, with electron micro-probe, 3B19
f free Ti in, spectroph., 4B81
ium complexes, with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
h *N*-phenylcinnamohydroxamic acid, 4B78
ium dioxide, detmn. of As, Cr, Mn and V in, by n.a.a., 5B128
f Cr, Cu and Mn in pigments based on, by a.a.s., 1B95
f impurities in, spectrogr., 4B80
f Pb in, by a.a.s., 1B94
ium nitride, detmn. of free Ti in, spectroph., 4B81
cco, analysis of volatile pyrolysis products of constituents of, by g.s.c., 2D63
plications of cellulose ethers in production of, review, 3C69
f m.s. to problems in production of, 2A1*C*
ay of α-amylase in, improved dyed amylose or use in, 2D160
ection and detmn. of diols and glycerol in, by n.p.l.c., 2C14
mn. of As and Au in, by n.a.a., 5D7
f maleic hydrazide in, spectroph., collaborative study of, 5G37
f nicotine in, spectroph., 2D91

Tobacco, determination—*continued*
of *N'*-nitrosonornicotine in, or in products of, by h.p.l.c., 6D58
of SiO_2 in, gravim., B.S.I. method for, 2D18
identn. and detmn. of methomyl in green or cured, by hydrolysis - g.l.c., 3G46
sepn. and identn. of *N*-nitrosamines of alkaloids of, by t.l.c., 2D90
Tobacco smoke, analysis, modified smoke machine for, 2D14
of phenols in condensates of, by t.l.c. - g.l.c. and g.l.c. - m.s., 5D40
detmn. of acetaldehyde in vapour phase of, by g.c., 3D53
of NH_3 in, by g.c., 3D17
of CO_2 and CO in, by g.s.c., 2D15
of *N*-nitrosamines in, by g.l.c. and g.l.c. - m.s., 2D89
identn. of polycyclic hydrocarbons in, liquid chrom. - g.l.c. scheme for, 2D74
sepn., identn. and detmn. of fatty acids in condensates of, by g.l.c. of methyl esters, 2D62
Tocopherols, detmn., indirect spectroph., 3D116
—, **α-,** detmn. in blood plasma, by g.c., 6A1*C*
sepn. from cholecalciferol and retinol, by h.p.l.c., 2J10
Tocotrienols, detmn., indirect spectroph., 3D116
***p*-Tolualdehyde,** detmn. in air, by g.l.c., 5H16
Toluene, analysis of products of nitration of, by g.l.c., 6C95
of products of side-chain chlorination of, by g.l.c., 6C42
detmn. in biol. materials or water, by g.c., preconcn. method for, 5H33
in waste water, by g.l.c., 5H43
identn. in pyrolysis products of methane, by g.c., 6C13
identn. and detmn. in isopropyl alcohol, by g.l.c., 4C14
sepn. from benzene, by g.c., 3J35
—, **butylated hydroxy-,** see p-*Cresol,* 2,6-*di-t-butyl-*
—, **dinitro-,** detmn. in air, by isotope dilution - m.s., 5H17
—, **2,4-dinitro-,** identn. in smokeless powders, by t.l.c., 1C85
—, **pentabromo-,** identn. in sewage sludge, by g.l.c. - m.s., 3H48
—, **tetrabromo-,** identn. in sewage sludge, by g.l.c. - m.s., 3H48
—, **ααα-trifluoro-,** detmn. of purity of, by measurement of capacitance changes during melting of sample, 5C1
—, **2,4,6-trinitro-,** analysis of nitration acids used in production of, liquid chrom., 1C83
detmn. in air, by isotope dilution - m.s., 5H17
in air-borne dust, by g.l.c., 6H22
m.s. study of, 2C85
Toluene derivatives, nitro-, sepn. and detmn. in toluene-nitration products, by g.l.c., 6C95
***o*-Toluic acid,** detmn. in oxidation products of *o*-xylene, by g.l.c., 1C32
***o*-Toluidine,** detmn., voltamm., with use of passivated hanging-mercury-drop electrode, 5C33
***p*-Toluidine,** detmn., voltamm., with use of passivated hanging-mercury-drop electrode, 5C33
—, ***NN*-dimethyl-,** detmn., by g.l.c. of ring-trifluoroacetylated deriv., 3C33
Tomatine, sepn. from other potato glycoalkaloids, by g.l.c. of permethyl deriv., 1G3
Tomato juice, detmn. of *NN*-diethyl-2,6-dinitro-4-trifluoromethylaniline in, polarogr., 3H44
Tomatoes, detmn. of chloramben in, by t.l.c. - densitom., 2G21

Tomatoes, determination—*continued*
of *NN*-diethyl-2,6-dinitro-4-trifluoromethylaniline in, polarogr., 3H44
Toothpaste, detection and detmn. of Cd and Pb in, by a.a.s., 1C8
Tourmaline, detmn. of Ti in, spectroph., 5B126
Toxaphene, see *Camphechlor*
Toxicological analysis, applications of h.p.l.c. in, 2A1*C*
Trace analysis, calibration methods in, 4A6
cleaning of polyethylene containers for, 6J1
Tranexamic acid, detmn. in blood serum, by m.s. of *N*-heptafluorobutyryl deriv. of butyl ester, 2D46
Transferrin, analysis, by gel isoelectric focusing, 6A2*C*
detmn. in blood serum, fluorim., 2D126
Transplutonium elements, microchem. techniques used in preparation and study of, or of compounds of, 2B71
sepn., and sepn. from rare-earth metals, ion-exchange chrom., 2B72
Trazodone, detmn. in blood plasma, by g.c. - m.s., 6A1*C*
Trehalose, detection and detmn., paper chrom., 4C15
Trenbolone, detmn. in presence of its acetate, by t.l.c. - fluorim., 6D31
— **acetate,** detmn. in presence of its parent alcohol, by t.l.c. - fluorim., 6D31
Triamcinolone, detmn., spectroph., 3E26
in pharmaceutical preparations, spectroph., 4E42
Triamterene, h.p.l.c. study of, 2E49
1,3,5-Triazine, 2,4-diamino-6-mercapto-, detmn., iodim., 4C93
—, **hexahydro-1,3,5-trinitro-,** detmn. in air, by isotope dilution - m.s. 5H17
in air-borne dust, by g.l.c., 6H22
identn. and detmn., by g.l.c., 1C84
Triazine derivatives, detmn. in medicinal plants, by t.l.c., 1G13
1,2,4-Triazole, 3-amino-, detmn., by thermom. titration, 4C50
Tributylamine, perfluoro-, detmn. in biol. fluids or tissues, by g.l.c., 2D49
Trichlorphon, detmn. in presence of dichlorvos, by g.l.c., 3G41
Trichothecenes, detection in feeding-stuffs, by dialysis - t.l.c., 5G22
detection and detmn., review, 4G1
Tridemorph, identn. of diastereoisomers of, by t.l.c. - n.m.r., 1G16
sepn. from other fungicides, paper chrom., 3G25
Triethylamine, detmn., non-aq. coulom., 1C3
of H_2O in, conductim., 4C3
—, **2-chloro-,** inadequate protection afforded by rubber gloves in handling of, 4A20
Trifenmorph, detmn. in water, colorim. or spectroph., 6H45
Triflubazam, detmn. in blood or urine, with its metabolites, by h.p.l.c., 3D38
***Trifolium* spp.,** see *Clover*
Triforine, sepn. from other fungicides, paper chrom., 3G25
Trimellitic acid, detmn. in its anhydride, potentiom., 4C34
— **anhydride,** detmn. of parent acid in, volum., 4C34
Trimetazon, extraction from liver tissue and u.v.-spectroph. study of metabolites of, 6D30
Trimethoprim, detmn. in pharmaceutical preparations containing sulphamethoxazole, by g.l.c., 5E43
Trimethylamine, detmn. in fish, fish products other foods, by g.l.c., 3F10
in presence of methylamine and dimethylamin ion-exchange chrom., 5J17
Triphosphate, detmn. in phosphate mixtures, n.m.r., 2B96
gel chrom. - a.a.s., 4B90
Tris, see *Methane, tris(hydroxymethyl)amino-*
Trithionate, detmn. in presence of other polythi nates and $S_2O_3^{2-}$, by h.p.l.c. - fluorim., 2H
of $S_2O_3^{2-}$ and $S_4O_6^{2-}$, spectroph., 1B111
Tritium, detmn. in biol. tissues or faeces, by O-fla combustion - liquid scintillation countin 2D142
in gas mixtures, nuclear-reactor materials water, by liquid scintillation counting, 5B2
in hydrogen, Raman spectrom., 3B25
in org. compounds, see under *Organic elementa analysis*
in presence of Fe ions, quenching correctio for, 1B140
in reactor stack gas, 1A1*C*
in water, conversion to counting gas for, 2H electrolysis enrichment system for, 1A1*C*
of H^3HO and H^3H in air, 1A1*C*
Tritium compounds, detmn., by radio - g.c., 6B19
Trometamol, detmn., by oscillom. or visual titratio 3E48
Trophosphamide, detmn. in urine, in presence cyclophosphamide and its other metabolite by t.l.c. - spectroph., 3D46
Tropic acid, detmn. in presence of atropine a related compounds, u.v. spectroph., 3E10
Trypsin, see under *Enzymes, specific*
Tryptamine, 5-hydroxy-, detmn., spectroph., co tinuous photochem. method for, 5D64
in biol. tissues, fluorim., 3D88
in brain tissue, by t.l.c. - densitom., 2D93
Tryptophan, detmn., by g.l.c. - m.s., deriv. form tion for, 2D108
spectroph., continuous photochem. metho for, 5D64
in beans, spectroph., 5G5
in brain tissue, by t.l.c. - densitom., 2D93
in cereal protein products, interference Spies - Chambers method for, 5G4
in cereals, spectroph., 2G7
in feeding-stuffs, fluorim., 4G10
in presence of tyrosine, spectroph., 3D95
—, **5-hydroxy-,** detmn. in brain tissue, by t.l.c densitom., 2D93
Tryptophol, 5-hydroxy-, m.s. study of cerebrospina fluid, 6A1*C*
—, **5-methoxy-,** m.s. study of cerebrospinal-fluid 6A1*C*
Tubulin, detmn., gel electroph. - spectroph., 2D11
Tuna fish, detmn. of *N*-nitroso-compounds in canned by g.c., 4F6
Tungstate, detmn., potentiom., enzyme electrod for, 3J84
solvent extraction of, 6B161
Tungsten, concn., by co-pptn. on $MnO(OH)_2$, 4B1
detmn., by a.a.s., concn. method for, 4B119
indirect, 5B170
fluorim., 4B121
gravim., 1B125
oscillopolarogr., 5B171
spectroph., 2B17, 2B122, 4B4, 4B122, 4B12 6B182
indirect u.v., 5B170
in ammoniacal electrolyte, polarogr., 6B210
in beryllium or beryllium alloys, polarogr 6B57
in biol. materials, by n.a.a., 4D5

sten, determination—*continued*
n lanthanum or lanthanum oxide, spectrogr., 1B65
n minerals, ores or rocks, by activation method, 4B124
spectrogr., 6B13
spectroph., 5B172
n nickel or nickel alloys, avoidance of interference in thiocyanate method for, 3B160
n steel, emission spectrom., 1B144
spectroph., 5B172
n tin, by n.a.a., 5B124
n zirconium(IV) oxide, spectrogr., 1B99
of Al, Fe and Si in, comparison of methods for, 4B125
of C in, by combustion - g.s.c., 2B124
by high-temp. oxidation, 5B113
of concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
of N and O in, by g.s.c., 3B20
of Re in, by n.a.a., 5B169
on. from Pb, ion-exchange chrom., 6B134
from Mo, Re and V, ion-exchange chrom., 4B18
vent extraction of, with amine oxides, 3B80
with esters of dithiocarbamic acids, 4B2
with quaternary ammonium nitrates, 6B1
sten, reagents for, antipyrine - salicylfluorone, 4B123
magite, 2B122
2-carboxyphenyl)-2,6,7-trihydroxyxanthen-3-one and its ethanediol ester, 2B17
ystal violet - SCN^-, 6B182
ntipyrinylmethane - SCN^-, 5B172
iochrome black T, 2B122
nogallion, 4B121
nercapto-2,4-xylenol, 4B4
4',4''-methylidynetris(aniline), 1B125
lochrome black 6 BN, 2B122
N^-, 4B122
6,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
sten alloys, W - Fe, detmn. of Si in, amperom., 1B149
sten complex, with *N*-phenylbenzohydroxamic acid, voltamm. study of, 6B14
sten(VI) oxide, detmn. of Al, Fe and Si in hydrated, comparison of methods for, 4B125
of Si in, by a.a.s., 2B75
sten silicide, d.t.a. of, 5A6*C*
entine, detmn. in waste water, by g.c., 1H47
cidine, detmn. in fermentation media, spectroph., 4E24
sine, detmn., spectroph., 6C45
in presence of tryptophan, spectroph., 3D95
i-iodo-, sepn. from related compounds, ion-exchange chrom., 2D109
odo-, sepn. from related compounds, ion-exchange chrom., 2D109

U

ecane, detection and detmn. in hexane, 3C8
Undecenoic acids, g.l.c. study of methyl esters of, 3C17
ecynoic acids, g.l.c. study of methyl esters of, 3C17
il, detmn., coulom., 2D137
in malt wort, by h.p.l.c., 1F15
il derivatives, detmn., 2D137
hio-, detection in biol. tissues, by t.l.c., 1F13
ium, detection, colour reaction for, 5B106
micro-crystallogr., 3A5

Uranium, detection—*continued*
in minerals, ores or rocks, with ^{238}U decay products, γ-spectrom., 1B73
detmn., by isotope-dilution m.s., 2A7*C*
complexom., 3B87
coulom., 4B61, 4B62
polarogr., in aq. tributyl phosphate media, 6B97
spectroph., 1B13, 3B76, 4B59, 4B60, 6B96
purification of reagent for, 3B77
vanadim., indicator for, 4A14
volum., redox indicators for, 1A5, 2A18
X-ray spectrogr., pellet technique for, 2A1*C*
preparation of standard soln. for, 2B65
in air-borne dust, by n.a.a., 6H5
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, photom., 3H21
in coal, by n.a.a., 3B171
in inorg. materials, by n.a.a., 1B75
in minerals, ores or rocks, by n.a.a., 3B79
fluorim., 1B74
nuclear methods for, 6A3*C*
spectroph., 1B72
voltamm., 6B98
in nuclear-reactor fuels, 6B239*B*
in plutonium nitrate or oxide, spectroph., 5B112
in presence of Pb, polarogr., 3B78
of Te in biol. or environmental materials, by n.a.a., 3D22
in sea-water, by electro-deposition, 4H23
by ion exchange - fluorim., 2H27
in sediments, photom., 3H21
in soil, by ion exchange - α-counting, 2G5
in soln. of spent nuclear fuels, by thermom. titration, 1B77
in thoria, X-ray emission spectrom., 6B93
in urine, by isotope-dilution m.s. or fluorim., sepn. method for, 1A1*C*
in water, by ion exchange - X-ray emission spectrom., 6H34
by n.a.a., 2H16
with use of fission-track technique, 2H26
fluorim., 1B74
ion-exchange chrom. - fluorim., 5H20
photom., 3H21
of Co in, spectroph., 3B85
of energies and γ-intensities of ^{235}U sample, 6B95
of F^- in, potentiom., with ion-sensitive electrode, 6B101
of Gd in, X-ray spectrom., 4B63
of impurities in, by a.a.s., apparatus for, 2B67
of ^{235}U and total, in uranium dioxide, 5B105
extraction from molten nitrate media, with copper(II) bis-(2-ethylhexyl) phosphate, 3B17
sepn. from Bi, paper electroph., 3B5
from Ce, Co, Fe and Ni, paper chrom., 6B1
from Fe, by solvent extraction, 1B7
from Ta, by solvent extraction, 6B157
from Th, by selective sorption, 3B81
liquid chrom., 3B82
from Ti, by t.l.c., 3B95
from V, by solvent extraction, 5B109, 5B151
ion-exchange chrom., 3B4
solvent extraction of, with amine oxides, 3B80, 5B107
with β-diketones, 1B7
with *NN*-disubstituted amides, 6B17
with quaternary ammonium nitrates, 6B1
with tributyl phosphate from alcohol or acetone soln., 1B76
with trioctylamine - toluene from H_2SO_4 media, 6B99

Uranium—*continued*
sorption on tin(IV) phosphate from nitrate soln. of, 1B78
Uranium, reagents for, arsenazo III, 3H21
bromopyrogallol red - cetrimide, 1B72
Chrome Azurol S, 3B77
5-diethylamino-2-(2-pyridylazo)phenol, 5B112
5-diethylamino-2-(2-thiazolylazo)phenol, 4B59
malachite green, 6B96
2-mercaptopyridine 1-oxide, 3B76
2-methoxy-*N*-(*p*-tolyl)benzohydroxamic acid, 4B60
4-methoxy-*N*-(*m*-tolyl)benzohydroxamic acid, 1B13
2,2′-[pyridine-2,6-diylbis(methylidynenitrilo)]diphenol, 5B106
Uranium complexes, of UO_2^{2+} with 5,5′-methylenedi(salicylic acid), 6B179
with long-chain aliphatic amines and Cl^-, 2B66
Uranium compounds, detmn. of Tc in, 2A7*C*
Uranium hexafluoride, detmn. of bound N in, with use of NH_4^+-sensitive electrode, 2A7*C*
Uranium ores, sepn. of Pa from, by solvent extraction, 6B94
Uranium oxides, detmn. of F^- in, potentiom., with ion-sensitive electrode, 6B101
of impurities in, by a.a.s., 5B108
—, U_3O_8, detmn. of Cu and Pb in, by a.a.s. or spectroph., 6B100
of Ni in, liquid chrom. - spectroph., 2B68
—, UO_2, detmn. of total U and ^{235}U in, 5B105
Urea, analysis of products of reaction with ethylenediamine of, by t.l.c. - densitom., 6C29
detmn., enzymic - spectroph., with use of immobilised enzymes, 3D1
potentiom., enzyme electrode for, 2J138
immobilised-enzyme stirrer for, 1J74
in blood or blood serum, enzyme electrode for, 5J96
in meat products, with Merckognost test-stick, 5F25
of biuret in, differential-scanning calorim. or by t.g.a., 3G14
—, **1-(2-aminoethyl)-,** detmn. in reaction products of ethylenediamine and urea, by t.l.c. - densitom., 6C29
—, **1-{3-azabicyclo[3.3.0]oct-3-yl}-3-(toluene-4-sulphonyl)-,** g.c. and g.c. - m.s. study of thermal decomposition of, 4E45
—, **1-(4-chlorophenyl)-3-(2,6-difluorobenzoyl)-,** detmn. in bovine manure, by h.p.l.c., 1G17
—, **1,3-diphenylthio-,** detmn., spectroph., 4C26
—, **1,1′-ethylenedi(-,** detmn. in reaction products of ethylenediamine and urea, by t.l.c. - densitom., 6C29
—, ***N*-ethyl-*N*-nitroso-,** detmn., by h.p.l.c., 2F14
—, ***S*-methylisothio-,** detmn., spectroph., 4C26
—, **phenylthio-,** detmn., spectroph., 4C26
—, **seleno-,** detmn. in presence of $SSeO_3^{2-}$ and SO_3^{2-}, iodim., 2B115
—, **thio-, derivatives,** detmn., volum., 2C26
Urea derivatives, 1,3-dialkyl-1,3-diphenyl-, identn. in smokeless powders, by t.l.c., 1C85
Urease, see under *Enzymes, specific*
Uric acid, detmn., by chemiluminescence method, 5E4
enzymic - spectroph., with use of immobilised enzymes, 3D1
in blood or blood plasma, errors attributable to sample storage in, 1D2
in blood serum, correction for turbidity in, 1D1
Uric acid derivatives, sepn. and identn. of tetraethyl, by g.l.c. - i.r. spectroph. - n.m.r., 3D114
Uridine, detmn. in malt wort, by h.p.l.c., 1F15
—, **5-fluoro-,** detmn. in RNA hydrolysates, by h.p.l.c., 3D107
Uridine diphosphoglucose, detmn. of glucoprotein formed from, radiom., 1D89
Urinary calculi, thermoanalytical studies of, review 2J159
Urine, analysis of metabolites of polychlorinated bi- and ter-phenyl deriv. in, by m.s., 4D32
of steroids in, 4A1*C*
improved liquid-chrom. apparatus for, 3D7
detection of alcohols in, by g.c. - m.s., 5A2*C*
of clonazepam and its metabolites in, by t.l.c., 5D20
of codeine and its metabolite in, by t.l.c., 6D1
of drugs in, by g.l.c., 1D17
of drugs of abuse in, scheme for, 3D28
of oligosaccharides in, by t.l.c., 2D58
detmn. of adrenaline in, by g.l.c., 1D25
improved trihydroxyindole method for, 2D8
of Al in, by n.a.a., 5A5*C*
of amethocaine *N*-oxide in, by g.l.c., as methyl 4-(butylmethylamino)benzoate, 2D38
of amitriptyline in, by g.l.c. or u.v. spectroph., 2D36
of NH_4^+ in, ion-exchange chrom., 5J17
of apomorphine in, by g.l.c. of trimethylsilyl deriv., 3D29
of As in inorg. form and of mono- and di-methylarsine in, by g.l.c. of diethyldithiocarbamates, 5H30
of As in inorg. and org. forms in, by a.a.s., 5H29
of atenolol in, by g.l.c. of heptafluorobutyryl deriv., 1D26
of barbiturates in, by g.l.c., 6D19
of 1,4-benzodiazepine deriv. in, differential pulse polarogr., 5D22
of Cd in, by a.a.s., 6D9
of *S*-carboxymethylcysteine in, with use of amino-acid analyser, 5D36
of chloramphenicol and its metabolites in, by g.l.c. - m.s., 4D16
of chloroquine in, by g.l.c., 4D29
of chlorprothixene in, by m.s., 6D26
of Cr in, by a.a.s., 3D23
of clioquinol conjugates in, by h.p.l.c., 3D45
of cloxazolam and its metabolites in, spectroph., 3E38
of cocaine in, by g.l.c. of pentafluoropropionyl deriv. of reduction product, 3D30
of cyclophosphamide and its metabolites in, by t.l.c. - spectroph., 3D46
of diamines in, by g.l.c. of pentafluorobenzoyl deriv., 6D54
of 2,6-diaminopimelic acid in, de-salting procedure for use in, 1D70
ion-exchange chrom. - spectroph., 1D71
of diamorphine and its metabolites in, by g.l.c., 2D27
of diclofenac in, by g.l.c., as corresponding indolone, 4D27
of diphenhydramine in, u.v. spectroph., 3D43
of diphenylpyraline and its metabolites in, by t.l.c. - u.v. spectroph., 5D31
of dopamine in, by a.a.s. or radiom., 1D60
of elements in, by n.a.a., 4D6
X-ray emission spectrom., 1D5
of ethanol in, enzymic - amperom., 2D47
of 4-ethylsulphonylnaphthalene-1-sulphonamide in, by g.l.c. of methyl deriv. or fluorim., 2D56
of flavoxate and its metabolite in, by t.l.c. - densitom. and g.l.c. of methyl ester, 5D29
of flucytosine in, by h.p.l.c., 3D48

determination—*continued*
f flurazepam and its metabolites in, by g.l.c., 2D31
f formate in, enzymic - fluorim., 3D63
f frusemide in, by h.p.l.c., 3D48
f D-glucaric acid in, enzymic, effect of *in vitro* pH changes in, 2D65
f glucose in, spectroph., 3D55
f hydrochlorothiazide in, by g.l.c. of tetramethyl deriv., 6D32
f 17-hydroxycorticosteroids in, colorim., 1D31
f 5-hydroxyindol-3-ylacetic acid in, by g.l.c. - m.s. of trimethylsilyl deriv., 2D94
f 4-hydroxy-3-methoxy-mandelic and -phenylacetic acids in, by g.l.c., 6D44
f indol-3-ylacetic acid in, by g.l.c. - m.s. of trimethylsilyl deriv., 2D94
f iproclozide in, by g.l.c., 2D37
f isoniazid in, spectroph., 4E40
f kanamycin in, fluorim., 3D33
f ketamine and its metabolites in, by h.p.l.c. of 4-nitrobenzamide deriv., 6D27
f [1-^{14}C]lactose in, enzymic - scintillation counting, 4D35
f Pb in, by a.a.s., 4D4
f leptazol in, by g.l.c., 5D25
f maprotiline in, by g.l.c. of heptafluorobutyryl deriv., 6D24
f Hg in, automated spectroph., 3B56
by a.a.s., 6D11
by a.f.s., 3B58
f 1-(2-methylaminopropyl)-2-phenyladamantane in, by g.l.c. of chlorodifluoroacetyl deriv., 6E30
f methylmalonic acid in, comparison of automated and manual methods for, 2D66
f minocycline in, fluorim., 2D42
f morphine in, by h.p.l.c. - fluorim., 2D26
f β-naltrexol and naltrexone in, by g.l.c. of trimethylsilyl deriv., 3D49
f nicotine and its metabolites in, by t.l.c. - spectroph., 3D31
f nitrazepam in, spectroph., 5E35
f N isotopes in, by m.s., 1D15
f ^{15}N in, emission spectrom., 1D14
f noradrenaline in, by g.l.c., 1D25
improved trihydroxyindole method for, 2D88
f oestriol in, by t.l.c. - fluorim., 3D79
by t.l.c. - spectroph., 5D57
enzymic hydrolysis procedure for use in, 1D56
f oestriol 16-glucuronide in, spectroph., 6D49
f oestrogens in, avoidance of interferences in, 2D83
spectroph., 1D55
f oxalic acid in, spectroph., 3D66
f 17-oxosteroids in, liquid chrom., 3J14
f 20-oxosteroids in, enzymic, 3D82
f paraquat in, by t.l.c., 1D36
f pethidine and its basic metabolites in, by g.l.c., 6D22
f phencyclidine and its metabolites in, by g.l.c. - m.s., 4D21
f PO_4^{3-} in, automated spectroph., 5D11
f pinazepam and its metabolites in, by g.l.c. - m.s., 3D36
f Pu in, 1A1*C*
by electro-deposition - α-counting, 2D12
f polyamines in, by g.l.c. of pentafluorobenzoyl deriv., 6D54
liquid chrom., 2A1*C*
f K in, ion-exchange chrom., 5J17
f ^{231}Pa and its decay products in, 1A1*C*
f protein in, comparison of methods for, and normal values, 4A1*C*

Urine, determination of protein—*continued*
comparison of spectroph. methods for, and immunoelectroph., 3D99
of salicylic acids and their metabolites in, fluorim., 1D24
of Na in, ion-exchange chrom., 5J17
of steroid metabolites in, by g.c., 6A1*C*
of SO_4^{2-} in, by a.a.s., 2D21
of talinolol in, spectroph., 5D27
of testosterone in, by t.l.c. of trimethylsilyl deriv. - fluorim., 3D81
of thiamine in, fluorim., 4D69
of thiamphenicol and its metabolites in, by g.l.c. - m.s., 4D16
of thiazinamium methyl sulphate in, by g.l.c., 5D30
of thiodiacetic acid in, by g.l.c. of methyl ester, 5D36
of timolol in, by g.l.c. of heptafluorobutyryl deriv., 5D28
of triflubazam and its metabolites in, by h.p.l.c., 3D38
of U in, by isotope-dilution m.s. or fluorim., sepn. method for, 1A1*C*
of volatile compounds in, by computerised m.s., 6A1*C*
by g.c. - m.s., 6A1*C*
by g.l.c., 2D61
extraction of phenylpyruvic acid from, decarboxylation during, 6D42
identn. of 2-hydroxyoestradiol in, scheme for, 4D50
identn. and detmn. of carboxylic acids in, comparison of isolation methods for, 3D62
of (*S*)-3,4-dihydroxybutyrate in, by g.l.c. - m.s. of trimethylsilyl deriv., 2D64
of valproic acid and its amide in, by g.l.c., 6D21
isolation of *N*-methylated basic amino-acids from, ion-exchange chrom., 2D101
isolation and characterisation of glucuronide-conjugated hydrocortisone metabolites in, 5D60
sepn. of amino-acids from, filtration device for, 3D90
of proteins of, gel electroph., 1D76
sepn. and detmn. of catecholamine deriv. in, liquid chrom. - fluorim., 6D55, 6D56
of coproporphyrin isomers I and III in, by t.l.c. - spectroph. (or fluorim.), 2D133
sepn. and identn. of 3-(4-chlorophenyl)-2-methyl-4-oxopyrido[2,3-*d*]pyrimidine metabolites and decomposition products in, 1D19
Uronic acids, detmn. in presence of uronides, fluorim., 2D59
in sulphite spent liquors, by g.l.c. of corresponding alditol acetates, 3C72

V

Valeramide, 2-propyl-, identn. and detmn. in urine, with its parent acid, by g.l.c., 6D21
Valerian oil, t.l.c., liquid-chrom. and g.l.c. studies of, and colorim. method for detmn. of ester content of, 5E21
Valeric acid, detmn. in aq. soln., by g.l.c., extraction conditions for, 4C20
γ-Valerolactone, identn. in waste water from oil-shale retort, 2A1*C*
Valine, detmn., colorim., 3C22
Valproic acid, detmn. in blood plasma or blood serum, inter-laboratory study of, 6D20
identn. and detmn. in urine, with its amide, by g.l.c., 6D21
— **sodium salt,** detmn. in blood plasma, by methylation - g.l.c., 5D19

Vanadate, detmn. in presence of CrO_4^{2-} and MnO_4^-, by reactive ion exchange - spectroph., 5B25
Vanadium, detmn., biamperom., 1B105
by a.a.s., 3B112, 3J59
by catalytic - ring-oven method, 4B6
by kinetic - biamperom. method, 1B16
spectroph., 1B13, 1B106, 2B104, 2B105, 3B113, 4B9, 4B99, 4B100, 4B101, 5B150
voltamm., 3B114
in air-borne dust, by a.a.s., 6H9
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 1H3, 3H5, 3H6
in aluminium, by a.a.s., 1B56
in beryllium or beryllium alloys, polarogr., 6B57
in biol. materials, by a.a.s., 3D8
in boric acid, by electrolysis - spectrogr., 5B85
in corundum, by n.a.a., 4B49
in lanthanum or lanthanum oxide, spectrogr., 1B65
in minerals, ores or rocks, 4B98
in mussels, by m.s., 4F1
in petroleum or petroleum products, by a.a.s., 1C57, 3C45
spectrogr., 2C49
spectroph., 3C46
in plants, spectroph., 4D11
in presence of bivalent metals, ion-exchange chrom. - spectroph., 3B115
of H_2O_2 or PO_4^{3-}, by chemiluminescence method, 6B154
in sediments, by a.a.s., 6H26
spectrogr., 2H17
in silica, spectroph., 6B117
in silicates, by a.a.s., 2B77
spectroph., 2B78
in steel, by m.s., 4B144
emission spectrom., 2B142, 4B145
spectroph., 5B198
with ion micro-probe, 2J111
in titanium dioxide, by n.a.a., 5B128
in water, by n.a.a., 2H16
spectrogr., 5H19
of C in, by combustion - g.c., with use of heating by magnetic field, 5B152
of impurities in, spectrogr., 6B155
of N in, by γ-activation, 2B89
of V^{II} in presence of V^{III}, spectroph., 6B153
of V^{IV} and V^{V} in presence of each other, ring colorim., 1B115
sepn. from Al, Cr, Ti and U, by solvent extraction, 5B151
from highly saline matrices, by selective pptn., 6B12
from Fe, by ion exchange, 2J16
from Fe or from Ti and U, ion-exchange chrom., 3B4
from Mo, Re and W, ion-exchange chrom., 4B18
from Ti, by t.l.c., 3B95
from U, by solvent extraction, 5B109
solvent extraction of, with tributyl phosphate, 2B106
Vanadium, reagents for, 7-(α-anilinobenzyl)-8-hydroxyquinoline, 3B113
p-anisidine (or *p*-phenylenediamine) - $K_3Cr(CN)_6$, 4B9
crystal violet - 4-(2-pyridylazo)resorcinol, 4D11
2-(3,5-dibromo-4-methyl-2-pyridylazo)-5-diethylaminophenol, 2B78
2,9-dimethyl-1,10-phenanthroline, 6B153
2-ethoxycarbonyl-5-hydroxy-1-(4-tolyl)pyridin-4-one, 2B104
H_2O_2, 3B115
Vanadium, reagents for—*continued*
3-hydroxy-2-methyl-1-phenylpyridin-4-one, 4B101
mercaptoacetic acid - tannic acid, 3C46
4-methoxy-*N*-(*m*-tolyl)benzohydroxamic acid, 1B13
1-naphthol - *p*-phenylenediamine coupling product, 4B99
nitron - 4-(2-pyridylazo)resorcinol, 2B105
N-phenylbenzohydroxamic acid, 6B117
N-phenylcinnamohydroxamic acid, 4B150
N-phenyl-2-naphthohydroxamic acid, 1B106
poly-(8-hydroxy-5-vinylquinoline), 6B12
thymolphthalein complexan - F^-, 4B100, 5B198
tropolone, 1B115
Vanadium alloys, V-Fe, analysis, sample preparation for, 4B142
Vanadium complexes, with gossypol deriv., 4B98
with 5,5′-methylenedi(salicylic acid), 6B179
with *N*-phenylbenzohydroxamic acid, voltamm study of, 6B14
Vanadium silicide, d.t.a. of, 5A6*C*
Vanadyl ion, detmn., by e.s.r., 2B19
Vanillin, detmn., bromim., 2C37
volum., 2C38
Vanillylmandelic acid, see *Mandelic acid, 4-hydroxy-3-methoxy-*
Varnish, analysis of head-space vapours of, by g.l.c 4C90
Vegetable oils, see also *Colocynth-seed oil*; *Corn oil*; *Linseed oil*; *Olive oil*; *Palm oil*; *Rapeseed oil*
detmn. of amide- or amine-N in, by acidic extraction - Kjeldahl method, 3F50
of polymers and oxidation products in heated by detmn. of material not eluted during g.l.c analysis, 4F34
use of electronic data-processing methods i detmn. of fatty acids and of constituents o unsaponifiable fraction of mixtures of, 2F44
Vegetables, see also *Beans*; *Cabbage*; *Carrots*; *Celery*; *Lettuce*; *Onions*; *Peas*; *Potatoes*; *Spinach*; *Tomatoes*
detection and detmn. of carbaryl, methiocarb and propoxur in, by t.l.c. and g.l.c., 4G37
detmn. of ascorbic acid in, spectroph., with us of alcohol slurries, 2F50
of Cd, Cu and Pb in, inverse voltamm., 3F2
of Cd, Cu and Zn in, oscillopolarogr., 6G1
of captafol, captan and quinomethionate in, b g.l.c., 2G30
of carbamate and urea herbicides in, by g.l.c of methyl deriv., 5F45
of dicofol in, by h.p.l.c., 2G29
of dietary-fibre content of, enzymic - gravim 5F4
of maleic hydrazide in, spectroph., collaborativ study of, 5G37
of *N*-nitrosamines in, by g.c., 6F5
of organophosphorus pesticides in, by g.l.c avoidance of interference by S compounds in, 2G30
comparison of extraction methods for, 5G34
of Se in, fluorim., 5F9
sepn. and detmn. of carbamate pesticides in, by t.l.c. - enzymic, 2G34
Veratrole, detmn., by g.l.c., 2C30
Vinegar, analysis, and detmn. of extract content of 6F21
Vinyl chloride, detection and detmn. in foods, by g.l.c., 2F10
detmn., by g.l.c., 5C55
in air, by g.c., 3H12, 5J25
with use of Stark-modulated absorption o i.r. laser radiation, 1H16

chloride, determination—*continued*
in air, fat simulant or poly(vinyl chloride), by g.l.c., 3C80
in air or in poly(vinyl chloride), by g.l.c., standards for, 6C85
in foods, by g.l.c. of head-space vapour, 2F11
of metabolites of, in urine, with use of amino-acid analyser and by g.l.c., 5D36
entn. and detmn. of impurities in, by g.l.c., 1C70
l groups, detmn. of Si-bonded, bromim., 4C5
colorim., 2C10
lidene chloride, detection and detmn. of monomeric, in aq. polymer emulsions, by g.c., 3C75
min A, see *Retinol*
min-A compounds, detmn., voltamm., 6E15
min B_1, see *Thiamine*
min B_2, see *Riboflavine*
min B_6, see *Pyridoxine*
min B_{12}, see *Cobalamin, cyano-*
min C, see *Ascorbic acid*
min D_2, see *Calciferol*
min D_3, see *Cholecalciferol*
min-D compounds, detmn. in presence of vitamin A, voltamm., 6E15
min K_1, see *Phylloquinone*
min K_2, see *Menaquinone*
min K_3, see *Menaphthone*
mins, bibliography of electroph. studies of, 5J20
pn. of H_2O-sol., by t.l.c., 1J18
pn. and detmn., ion-exchange chrom., 3E3
ammetry, cathodic effects in behaviour of glass-sealed electrodes for, 2J140
1,3-dioxolan-2-one media, 1J76
lse stripping technique for, 2A1*C*
anodic-stripping, automatic apparatus and technique for, 5J98
use of loss of hydrogen over-voltage on graphite electrodes used for, 5J100
timation of formation of intermetallic compounds in mercury in, 3B10
athodic-stripping, automatic apparatus and technique for, 5J98
metric analysis, apparatus for micro-, 5J4
mparison of stepwise and continuous addition of titrant in automated, 2A17
mputer program for calculation of equilibrium ionic concn. in non-aq. acid - base titrations, 1A11
ying and weighing of standard reference materials for, 5A11
fects of salts in, 1A10
d-point construction and systematic titration error in linear titration curves, 3A9, 6A15
inorg. compounds in non-aq. media, redox - mercurim., 6B6
ration errors inherent in use of Gran plots in, 1A9
metric analysis, amperometric, procedure for end-point location in, 2A16
metric analysis, complexometric, end-point construction and systematic titration error in linear titration curves, 3A9
d-point indication in back-titrations based on 1 : 2 metal - ligand complex formation, 1B9
th use of electrode sensitive to Eriochrome black T, 5J93
metric analysis, conductimetric, acid - base titrations in, 6A14
in 2-methoxyethanol media, 4C2
ocedure for end-point location in, 2A16
metric analysis, coulometric, computer location of end-points in high-precision, 2J143
fect of cell geometry in, 1J77
ectro-generated Cr^{VI} as reagent for, 6A13
Volumetric analysis, potentiometric, acid - base, by single pH measurement, 4A15
detmn. of equivalence-points and pK values of two- and three-pK systems in, 6A16
in anhyd. HF media, 4B16
in mixtures of ethanediol with other solvents, 1C23
titration error in, 5A12
titrations of diprotic acids in dipolar aprotic acids, 6A17
apparatus for construction of deriv. titration graphs in, 3J87
automated systems for, 1J69, 3J86
in 1,3-dioxolan-2-one media, 1J76
procedure for locating equiv.-point in, 2A12
selectivity in direct titrations in, 2J142
universal equation for simulation of curves in, 6A18
Volumetric analysis, spectrophotometric, apparatus for, automated, with correction for turbidity and dilution, 4J4
procedure for end-point location in, 2A16
Volumetric analysis, thermometric, 2A1*C*

W

Wastes, see *Industrial wastes*; *Municipal wastes*
Water, see also *Humidity*
bibliography of pollution of, 2F43
books on, 6H57*B*
detmn., potentiom., in HF media, 4B16
in cellulose acetate soln., by ultrasonic method, 6C76
in cereals or oilseeds, near-i.r. reflectance spectroph., 3G5
in electrostatically sprayable epoxy-resin powders, comparison of methods for, 2C77
in 2-furaldehyde, by electrom. titration, 6C57
in gas mixtures, evaluation of standards prepared in treated aluminium cylinders, 3A1*C*
in highly viscous liquors, i.r. spectroph., 1C66
in iron minerals, by dynamic Karl Fischer method, 3B146
in meat, gravim., microwave-oven method for, 5F21
in meat or meat products, i.r. a.t.r. spectroph., 4F16
in milk powder, time-domain spectrom., 6F16
in natural gas mixtures, by g.l.c., 1C60
by g.s.c., 1C59
in nylon 66 fibre, by n.m.r., 1C67
in org. compounds, by g.c., 3J46
in org. solvents, conductim., with anthracene - sodium reagent, 4C3
in pharmaceuticals, coulom., 2E2
in polymers, 2A1*C*
in sulphur hexafluoride, B.S.I. methods for, 3B120
in used crankcase oil, by g.c., 3C54
in xylenes, by g.c., 5J25
of extraneous, in chickens, 6F14
of ^3H in, conversion to counting gas for, 2H23
electrolysis enrichment system for, 1A1*C*
of ^3H-labelled, by radio - g.c., 6B19
of H^3HO in air, 1A1*C*
of ^{18}O in, by charged-particle activation, 1A1*C*
on sugar, by Karl Fischer method, 5F17
Water, deuterated, detmn. of ^2H_2O in, by isotope exchange - m.s., 4B20
by photon activation, solid-state track detectors for, 3B26
Water, high-purity, detmn. of Bi, Cu, Ag and Tl in, anodic-stripping voltamm., 2B13

Water, industrial, detmn. of B in reactor-moderator, conductim., 3B27
of CO_2 in power-station, with use of gas-sensing membrane electrodes, 1H32
of hydraulic oil in cooling, i.r. spectroph., 1H39
of hydrocarbons in steam condensate, by g.c., 5J25
of ^3H in nuclear-reactor coolant, by liquid scintillation counting, 5B27
of 2-hydroxyethylidenedi(phosphonic acid) in power-station cooling, colorim., 4H32
of Hg in, by a.a.s., 1H30
of Nb, Tc, Te and Zr in nuclear-reactor coolant, sepn. scheme for, 6B21
of oils in, fluorim., 5H39
of trace metals in nuclear-reactor coolant, by n.a.a., 6B20
quality control of, in petroleum industry, 3A1*C*
Water, natural, analysis, automated methods in, 1H23, 6H55*B*
n.a.a. evaluation of techniques for, 6A3*C*
of org. volatile compounds in, by g.c. - m.s., 6A1*C*
apparatus for monitoring conductivity of river, 2H15
detection of pollutants in, by X-ray fluorescence, 5A3*C*
detmn. of alkylarsenic 'acids' in, by reduction - g.l.c., 6G7
of ammonia-N in, potentiom., with NH_3-sensing electrode, 4H24
of anionic surfactants in, by a.a.s. or spectroph., 4H31
by two-phase titration, 2H43, 3H42
colorim., ion-exchange clean-up method for, 3H43
of Sb in, by g.c. - emission spectrom., 3D19
of aromatic amines in, spectroph., 1H37
of As in, by a.a.s., 3F5, 4E2
comparison of methods for, 3H29
indirect, 3H28
by g.c. - emission spectrom., 3D19
of As in inorg. form and of mono- and di-methylarsine in, by g.l.c. of diethyldithiocarbamates, 5H30
of As in inorg. and org. form in, by a.a.s., 5H29
of Be in, by g.l.c. of trifluoroacetylacetonate, 2H24
of Bi in, by electro-deposition - spectrogr., 2H20
of H_2BO_3 and BF_4^- in, spectroph., 3H20
of B in, spectroph., 3H19
of Br^- in, ion-exchange chrom. - coulom., 3H32
potentiom., with ion-sensitive electrode, 6H30
of Cd in, anodic-stripping voltamm., 1H29, 3H17
automated, 2H22
by a.a.s., 2H21
collection in soya-bean curd for, 4H20
by ion exchange - a.a.s., 1H28
potentiom., with ion-sensitive electrode, 6H30
of Cd in estuarine, by ion exchange - a.a.s., 4H18
of Ca in, automated amperom., 6H33
of CO_2 in, by pH titration, 3H22
of CO_2, HCO_3^-, CO_3^{2-} and OH^- in, by pH-change method, 2H28
of COD of, semi-automated spectroph., 3H30
of Cl^- in, by programmed coulom. titration in flowing soln., 2H39
ion-exchange chrom. - coulom., 3H32
Water, natural, determination—*continued*
of Cl in free form in, photom., 5H31
in free and combined available form in, colorim., 1H34
of cholesterol and coprostanol in, by g.l.c. of trimethylsilyl deriv., as indication of faecal pollution, 1H40
of Cr in, by co-pptn. with $PbSO_4$ - reflectance spectroph., 2D22
of Co in, by kinetic - thermom. method, 5B203
of Cu in, anodic-stripping voltamm., 1H29, 3H17
automated, 2H22
by a.a.s., 2H21
automated, 6H40
by ion exchange - a.a.s., 1H28
concn. by co-pptn. on $Al(OH)_3$ for, 6H32
polarogr., 5H24
of Cu in estuarine, by ion exchange - a.a.s., 4H18
of CN^- in, by indirect tensamm. titration, 6B109
potentiom., with ion-sensitive electrode, 6H30
of DDT in, by t.l.c., with concn. on DDT-specific sorbent, 5H38
of 1,2-dibromopropane in, 4H30
of *NN*-diethyl-2,6-dinitro-4-trifluoromethyl-aniline in, polarogr., 3H44
of edta in, by g.l.c. of ethyl ester, 3H37
of elements in, by a.a.s., 2H18, 6J55
review of atomisation techniques in, 5J49
with use of tantalum-strip atomiser, 5H21
by charged-particle activation, 2B9
by n.a.a., 2H16, 5A5*C*
evaluation of concn. by lyophilisation for, 3H16
sampling for, 2J149
collection on chelating-agent-loaded resin for, 5H18
sepn. procedure for, 5H20
spectrogr., 5H19
concn. by co-pptn. with $Fe(OH)_3$ for, 6H28
concn. in coagulated soya-bean protein for, 1H24
X-ray emission spectrom., 1H25
concn. methods for, 2H19
of elements in polluted, by a.a.s., 5H22
of elements in well, 6H29
of ethanediol in, spectroph., 3H35
of ethoxyquin in, by g.l.c., 5G20
of 4-ethylsulphonylnaphthalene-1-sulphon-amide in, by g.l.c. of methyl deriv. or fluorim., 2D56
of $Fe(CN)_6^{3-}$ in, fluorim., 2A1*C*
of $Fe(CN)_6^{3-}$ and $Fe(CN)_6^{4-}$ in, by reactive ion exchange - a.a.s., 2H31
of F^- in, colorim., interference by SO_4^{2-} in SPADNS method for, 2H38
potentiom., with ion-sensitive electrode, 2H36, 6H30
volum., 6H39
of formaldehyde in, by chemiluminescence method, 6H43
of fulvic acids in, 4H35
of gases dissolved in, by g.c., 5H23
of Au in, by a.a.s. or spectrogr., collection in soya-bean curd for, 3H18
of halohydrocarbons in, by g.l.c., 5H36
of hydroxylamine in, gravim., 6H36
of I in various chemical forms in, potentiom., with I^--sensitive electrode, 5H32
of Fe in, by a.a.s., automated, 6H40

r, natural, determination of Fe—*continued*
by co-pptn. as $Fe(OH)_3$ - X-ray emission spectrom., 6H31
by kinetic - spectroph. method, 5B184
spectroph., 4B139
of Fe^{II} in, colorim. or spectroph., with use of reagent-impregnated PVC film, 2H40
spectroph., 2H41
suppression of Fe^{III} interference in, 3H33
of Fe^{III} in, spectroph., 2H41
of Pb in, anodic-stripping voltamm., 1H29, 3H17
automated, 2H22
by a.a.s., 2H21, 4E2
automated, 1H33
by co-pptn. on $Fe(OH)_3$ - X-ray emission spectrom., 6H31
by electro-deposition - spectrogr., 2H20
by ion exchange - a.a.s., 1H28
polarogr., 5H24
potentiom., with ion-sensitive electrode, 6H30
of Pb in estuarine, by ion exchange - a.a.s., 4H18
of Mg in, automated amperom., 6H33
of Mn in, by a.a.s., 1H35
automated, 6H40
by electro-deposition - spectrogr., 2H20
spectroph., 4B134
of Hg in, automated spectroph., 3B56
by a.a.s., 1H30
collection in soya-bean curd for, 4H20
with collection on silver powder, 4H21
by a.f.s., 2B52
emission spectrom., 5B80
sample preservation for, 4H19
of methylmercury chloride in, by foam sepn. - g.l.c., 1H43
of Mo in, by ion exchange - a.a.s., 3H31
photom., 6B178
of Ni in, by electro-deposition - spectrogr., 2H20
of NO_3^- in, automated colorim., 3H23
automated dilution for, 5H26
by g.c., 6A1*C*
potentiom., electrodes for, 3B105, 3H24
spectroph., 2H33
of nitrate-N in, potentiom., with NH_3-sensing electrode, 4H24
of nitrilotriacetic acid in, in presence of other carboxylic acids, by g.l.c., 3H36
of NO_2^- in, by g.c., 6A1*C*
spectroph., 2H32
of N in, by automated Kjeldahl method, 3H25
of N in inorg. form in, by reduction - potentiom., with air-gap electrode, 5H25
of N in org. form in, potentiom., with NH_3-sensing electrode, 4H24
of *N*-nitroso-compounds in, by g.l.c., 5H35
of org. C in, by oxidation - i.r. spectroph., 6H42
with use of pCO_2 electrode, 1H36
of org. compounds in, a.c. polarogr., 4H28
by g.c., pre-concn. method for, 5H33
drop sampler for, 2H42
of organochlorine pesticides in, comparison of methods for, 5H37
of organomercury compounds in, by photochem. decomposition - a.a.s. or g.l.c., 1H42
of pesticides in, sampling and extraction methods for, 3G28
of petroleum in, colorim. or dielectrom., with collection on polypropene 'wool', 3H41*P*
of petroleum deriv. in, refractom., 4H36
of pH of, impedance stability of electrodes for, 3A1*C*

Water, natural, determination—*continued*
of phenols in, by g.l.c., 3H40
by g.l.c. of pentafluorobenzoyl deriv., 5H34
by g.l.c. of trimethylsilyl deriv., 6H44
of PO_4^- in, colorim., automated, 4H26
sample preservation for, 4H25
potentiom., enzyme electrode for, 3J84
X-ray fluorescence spectrom., 3H27
of P in, by indirect a.a.s., 3H28
colorim., automated and semi-automated methods for, 6H37
in presence of particulate matter, comparison of digestion methods for, 5H27
spectroph., 3H26
continuous-flow, 5G2
of Pu in, review, and method for, 6H35
of pollutants in, report of symposium on automatic sampling and measurement in, 5A4, 5H47
thermoanalytical methods for, 5A6*C*
of polychlorinated biphenyls in, by g.c., 4H33
of polycyclic hydrocarbons in, by g.l.c. - m.s., 3H39
by t.l.c. - fluorim., 1H38
of K in, potentiom., ion-sensitive electrode for, 3J82
of ^{226}Ra in, emanation apparatus for, 2H25
of Se in, by a.a.s., comparison of methods for, 3H29
of Ag in, potentiom., with ion-sensitive electrode, 6H30
of Squoxin in, by g.l.c. of methyl deriv. of spectroph., 3D52
of SO_4^{2-} in, automated spectroph., 2H34
by indirect a.a.s., 6H38
indirect spectroph., 4H27
turbidim., with use of haze meter, 3F30
volum., indicator for, 2B113
of S compounds in, by combustion - coulom., 5C8
of thiamine in, fluorim., 2A1*C*
of thiofanox and its metabolites in, by g.l.c., 5G36
of trifenmorph in, colorim. or spectroph., 6H45
of turbidity of, review, 3H15
of U in, by ion exchange - X-ray emission spectrom., 6H34
by n.a.a., with use of fission-track technique, 2H26
fluorim., 1B74
photom., 3H21
of Zn in, anodic-stripping voltamm., 1H29
by a.a.s., automated, 6H40
by co-pptn. on $Fe(OH)_3$ - X-ray emission spectrom., 6H31
disinfection, 3H50*B*
extraction of Hg and methylmercury from, with use of dithizone-treated polyurethan foams, 1H31
heavy metals in, 4H48*B*
identn. of pollutants in, 5A3*C*
of org. pollutants in, by g.l.c. - m.s., 6H41
instrumentation for quality control of, review, 6H27
report of symposium on quality parameters of, 2A4, 2H48*B*
sampling, n.a.a. evaluation of techniques for, 6A3*C*
sepn. of Hg^{2+} and CH_3Hg^+ in, ion-exchange chrom., 2B51
—, **sea-,** analysis, interference in a.a.s. methods used in, 1J47
detection of ligninsulphonate in, and detmn. of humic substances in, fluorim., 4H34

Water, sea-—*continued*
detmn. of alkylarsenic 'acids' in, by reduction - g.l.c., 6G7
of Am, Pu and U in, by electro-deposition, 4H23
of Sb and As in, by g.c. - emission spectrom., 3D19
of Ar in, by n.a.a., 6H46
of H_2BO_3 and BF_4^- in, spectroph., 3H20
of B in, spectroph., 3H19
automated, 4H22
of Cd, Cu and Pb in, by a.a.s., 2H21
of Ca in, potentiom., evaluation of electrodes for, 6H48
of Cu in, by a.a.s., with concn. at mercury thin-film electrode, 6H47
by isotope-dilution m.s., 1H27
of [^{14}C]DDT in, or in suspended matter in, by liquid scintillation counting, 6H52
of electrolytes in, ion-exchange chrom., 3A12
of F^- in, collaborative study of, 2H37
of Au in, by a.a.s. or spectrogr., collection in soya-bean curd for, 3H18
of Pb in, by a.a.s., 4D4
of Hg in, by a.a.s., 5B81
collection in soya-bean curd for, 4H20
of naphthalene and alkylnaphthalene deriv. in, u.v. spectroph., 2D55
of org. compounds in, drop sampler for, 2H42
of SO_4^{2-} in, polarogr., 6H49
of trace elements in, by a.a.s., with use of ultrasonic nebulisation, 5H22
of U in, by ion exchange - fluorim., 2H27
extraction of Fe^{3+} from, by ion exchange, 4J14
sepn. of Fe from, by interfacial co-pptn. with $Mg(OH)_2$, 6H50
sepn. and detmn. of hydrocarbons in, by g.l.c. - m.s. and h.p.l.c., 6H51
variability in chemical composition of, 4A4*C*
Waxes, see also *Paraffin wax*
analysis, by g.c., 4A5*C*
of avian preen-gland, by g.l.c. - m.s., 3D72
of plant, by g.l.c., 5D50
of unsaponified, review of chrom. methods in, 3D71
detmn., by ring-oven method, 5F62
of benzo[*a*]pyrene in petroleum or synthetic, fluorim., 2C62
Weighing, electronic balance for, eliminating need to weigh each sample holder, 3J1*P*
Wheat, assay of glutathione dehydrogenase (ascorbate) in flour and bran of, spectroph., 1F9
of proteases in, automated fluorim., 3G4
detmn. of carboxin in, by t.l.c. - spectroph., 4G25
of Co in grain or straw of, by a.a.s., 6G3
of 2,4-D in, by g.l.c. of ethyl ester, 3G23
of 2,4-D, dicamba and mecoprop in, by g.l.c. of methyl esters, 4G22
of 1,2-dibromoethane in, or in flour or bran of, volum., 5G38
of Mg and P in, by n.a.a., 6G2
of N in, by Kjeldahl method, TiO_2 - $CuSO_4$ catalyst for, 1G11
of oil, protein and H_2O in, or in flour or gluten of, near-i.r. reflectance spectroph., 3G5
of organophosphorus pesticides in, comparison of extraction methods for, 5G34
of PAP and PAPS in extracts of, by bioluminescence method, 3D112
of resmethrin in, by g.l.c., 4G39
of tryptophan in protein of, spectroph., 5G5
identn. of inositol hexaphosphate in, 5G3
Wheat flour, see *Flour*
Whey, detmn. of non-protein N in, 6F19
of residual annatto in, spectroph., 6F18
Wine, detection and detmn. of butane-2,3-diol and glycerol in, by h.p.l.c., 2C14
detmn. of CO_2 in sparkling, conductim., 5F53
of diols and glycerol in flavoured, by g.l.c. 5F39
of elements in, X-ray emission spectrom., 3D7
of ethanol in, by g.s.c., 1F19
of ethanol, glycerol and sugars in, by h.p.l.c. 5F57
of ethyl bromoacetate and trichloronitromethane in, by g.l.c., 1F21
of flavour, quality and maturity of, review 5F56
of 3-hydroxybutan-2-one in, enzymic - spectroph., 3F38
of phenethylamine in red, by g.l.c. of trifluoroacetyl deriv., 1F3
of sorbic acid in, by g.s.c., 1F20
colorim. or u.v. spectroph., g.l.c. analysis of substances interfering in, 5F58
of SO_2 in, potentiom., with SO_2-selective electrode, 3F37
Wolframite, detmn. of W in inclusions in, oscillopolarogr., 5B171
Wood, analysis of fatty acids and resin acids in mea of, by g.l.c. of methyl esters, 2H46
detection of preservatives in, by t.l.c., 3C70
detmn. of elements in tree-ring samples, by n.a.a. 5J108
of ellagic acid deriv. in, by g.l.c. of trimethylsilyl deriv., 2C68
of phenol - formaldehyde resins in, problems arising in, 6C83
sepn. of aldonic acid oligomers of, ion-exchange chrom., 6C78
sepn. and detmn. of heterocyclic and polycyclic compounds in, by h.p.l.c. (or micro-column liquid chrom.) - fluorim., 3C59
Wood pulp, see *Paper pulp*
Wool, detmn. in blends with Terylene fibres, i.r. spectropl., 5C52
Wort, see *Malt wort*

X

Xanthates, detmn., by thermom. titration, 4C25
—, **alkyl-,** detmn., volum., 1C13, 1C14, 2B73
—, **ethyl-,** detmn., non-aq. volum., 1C28
Xanthen-9-one derivatives, hydroxy-, sepn. and identn., by t.l.c., 3C37
Xanthine, detmn., enzymic, with use of pO_2 electrode, 3D113
Xenon, sepn. from Ar, H, Kr and O, by g.c., 3B84
stable isotopes of, bibliography, 5B26
X-ray diffractometry, apparatus for, low-temp. attachment for, 4J36
automatic Bragg-angle control for, 2J58
technique for study of radioactive powders by, 5J41
X-ray fluorescence analysis, see *Spectroscopy, emission, X-ray*
X-ray spectrometry, effects of geometrical window on rocking curves of instruments for, 2J59
***m*-Xylene,** detmn., by g.l.c., 2C30
***o*-Xylene,** analysis of liquid products of oxidation of, by g.l.c., 1C32
detection and detmn. in hexane, by g.c., 3C8
***p*-Xylene,** detmn. in air, by g.l.c., 5H16
in waste water, by g.c., 1H47
Xylenes, detmn. of K and Na in, flame photom., 1C4
of H_2O in, by g.c., 5J25

Xylenol, detmn. in tobacco-smoke condensate, by t.l.c. - g.l.c. and g.l.c. - m.s., 5D40
enols, detmn. in sewage effluent or water, by g.l.c. of trimethylsilyl deriv., 6H44
tol, sepn. from other polyols, by t.l.c. or paper chrom., 3C11
ose, detmn. in presence of other carbohydrates, by t.l.c. - densitom., 3C13
epn. from other carbohydrates, liquid chrom., 1D41

Y

row, detmn. of triazine herbicides in, by t.l.c., 1G13
st, characterisation of polycyclic hydrocarbons in, by g.l.c., 2F16
etection of wild, with use of membrane filters, 4A3*C*
etmn., radiom., 4A3*C*
of PAP and PAPS in extracts of, by bioluminescence method, 3D112
of polycyclic hydrocarbons in, 5A1*C*
of uric acid precursors in dried, u.v. spectroph., 5D84
erbium, detmn., spectrogr., effect of NaCl carrier in, 5B94
in air-borne dust, emission spectrom., 4H4
in alkaline-earth-metal fluorides, spectrogr., 6B59
in cerium(IV) oxide, spectrogr., 2B63
in presence of Eu and La, liquid chrom. - flame emission spectroph., 4B56
in rare-earth concentrates, by n.a.a., 6B85
in sediments, spectrogr., 2H17
in water, by n.a.a., 2H16
epn. from other lanthanoids and Sc, by selective sorption, 3B73
erbium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
erbium oxide, detmn. of Ho in, photom., 6B90
rium, detmn., spectrogr., 4B55
X-ray emission spectrom., diluent effects in, 1B14
in air-borne dust, emission spectrom., 4H4
in alkaline-earth-metal fluorides, spectrogr., 6B59
in sediments, *in situ* X-ray emission spectrom., 6H25
spectrogr., 2H17
of N in, by γ-activation, 2B89
epn. from Am, Ce, Cm and Eu, ion-exchange chrom., 2B72
ium complex, with bromopyrogallol red and hexadecylpyridinium ions, 6B90
ium compounds, detmn. of Cl^- in Si-containing, potentiom., with ion-sensitive electrode, 1B63
ium oxide, detmn. of Sc in, fluorim., 6B83
of Tb in mixtures with Gd and La oxides of, fluorim., 6B89
of U in, by n.a.a., 1B75

Z

lites, detmn. of Na in A, X and Y, flame spectroph., 3B174
n, concn., by co-pptn. on $MnO(OH)_2$, 4B15
liquid chrom., 2B14
etection, by colour reaction applied to single ion-exchange-resin grain, 1B4
etection and detmn., by t.l.c., 3B92
in aluminium alloys, flame emission spectrom., 3B63

Zinc—*continued*
detmn., amperom., 4B14
anodic-stripping voltamm., at amalgamated copper rotating-disc electrode, 5B21
by a.a.s., automated, 2J85
electrolytic pre-concn. method for, 6B8
with use of micro-probe - flame - adapter atomiser, 3B7
by fluorim. titration, 2B46
by g.l.c. of hexafluoroacetylacetone adduct, 2B47
by spectroph. titration, in turbid soln., 4B35
by thermom. titration, 6B5
colorim. or spectroph., with use of reagent-impregnated polymer sheet, 3B12
complexom., comparison of titrants for, 4B10
indicators for, 1A6, 1B43, 3B14, 6B4, 6B65
coulom., 6C30
fluorim., 1B44
gravim., 1B12
potentiom., 4B11, 5B14, 5B17
with silver - silver sulphide electrode, 1B10
reflectance spectroph., 5B70
spectroph., 3B14, 5B69
X-ray emission spectrom., with proton excitation, 1B6
in air-borne dust, by a.a.s., 2H7
by n.a.a., 2H5
emission spectrom., 4H4
spectrogr., 1H3, 3H5
in aluminium, by a.a.s., 1B56
concn. method for, 4B46
in beryllium or beryllium alloys, polarogr., 6B57
in biol. fluids, by a.a.s., 3D13
in biol. materials, by a.a.s., 3D8
by n.a.a., 4D5
in biol. materials in protein-bound form, by gel filtration - n.a.a., 3D11
in blood, by a.a.s., 4D14
in blood serum, by a.a.s., 5H21
in boron carbide, X-ray emission, 4B42
in brain tissue, by a.a.s., 6D6
in cadmium, spectroph., 1B48
in coins, by n.a.a., 6B44
in copper alloys, X-ray emission spectrom., 6B35
in ferrites, spectroph., 6B206
in fertilisers, by a.a.s., extraction methods for, 4G6
in fish tissues, by a.a.s., 5F6
in foods, anodic-stripping voltamm., 2F1
in fruit, polarogr., 4F2
in germanium or germanium alloys, stripping voltamm., 6B126
in hair, by a.a.s., 6D4
in liquid-chrom. effluents, with micro-adsorption detector, 4B5
in liver tissue, X-ray emission spectrom., 3D7
in lubricating-oil additives, polarogr., 6C68
in magnesium alloys, spectroph., 3B50
in magnetic materials, automated potentiom., 2B137
in marine organisms, comparison of methods for, 3D10
in meat, by a.a.s., 5F5
in metalloenzymes, emission spectrom., 2D143
in minerals, ores or rocks, by a.a.s., with direct introduction of powdered sample into flame, 5B217
polarogr., precision and accuracy of method for, 5B71
spectrogr., 6B13
in mussels, by m.s., 4F1

Zinc, determination—*continued*
in nickel alloys, ion-exchange chrom. - a.a.s., 6B218
in petroleum or petroleum products, by a.a.s., 3C56
in plants, by a.a.s., 6J54
comparison of acids in wet digestion methods for, 4D3
by n.a.a., 5G1
direct-reading emission spectrom., 2D5
spectrogr., 5D1
standards for, 2D4
X-ray emission spectrom., 3D7
in Portland cement, fluorim., 1B179
in presence of Cd, by kinetic - spectroph. method, 3B53
of Cu, anodic-stripping voltamm., 3B10
complexom., 5B39
of Cu and Ni, paper chrom. - spectroph., 6B10
of other elements, by t.l.c. - colorim., 2B15
in sediments, by a.a.s., 6H26
in situ X-ray emission spectrom., 6H25
in selenium, by a.a.s., 3B122
in sewage or sewage effluent, anodic-stripping voltamm., 1H29
in silicates, X-ray emission spectrom., 4B67
in skin, spectrogr., 4D2
in soil, by a.a.s., comparison of extractants for, 3G6
in sphalerite, anodic-stripping voltamm., with use of mineral-paste electrode, 5B68
in thoria, X-ray emission spectrom., 6B93
in tin, by n.a.a., 5B124
in tin oxide, X-ray spectrom., 3B91
in urine, by n.a.a., 4D6
X-ray emission spectrom., 1D5
in vegetables, oscillopolarogr., 6G1
in water, 6H29
anodic-stripping voltamm., 1H29, 2A4*C*
by a.a.s., 2H18, 5H21
automated, 6H40
by co-pptn. on $Fe(OH)_3$ - X-ray emission spectrom., 6H31
by n.a.a., 2H16
collection on chelating-agent-loaded resin for, 5H18
ion-exchange chrom. - a.a.s., 5H20
spectrogr., 5H19
X-ray fluorescence spectrom., concn. methods for, 2H19
in wine, X-ray emission spectrom., 3D7
of Cd, Cu and Pb in, by a.a.s., 3B11
of excess, in zinc oxide, electrochem., 2B48
of Ag in, spectroph., 3B44, 3B45
extraction from waste water of electroplating plants, by ion exchange, 4H38
sepn. from Bi, Fe, Pb and Mn, by ion exchange, 1B2
from Bi and Pb, by t.l.c., 5B4
from Cd, extraction chrom., 6B64
from Cd, Co, Cu, In and Hg, by ion exchange, 1B2
from Cd, Co, Cu, Pb and Mn, ion-exchange chrom., 1B17
from Cd, Co, Cu, Pb and Ni, ion-exchange chrom., 1J11
from Cd and Hg, ion-exchange chrom., 2B5
from Cu, by solvent extraction, 6B29
from Cu, Fe and Ni, ion-exchange chrom., 1B17
from Cu, Fe, Ni and Pd, ion-exchange chrom., 2J18
from Cu and Ni, by g.l.c. of salicylaldimine-deriv. complexes, 3B23
Zinc, separation—*continued*
from highly saline matrices, by selective pptn., 6B12
from Fe, by t.l.c., 2B136
from Hg, by solvent extraction, 5B83
from Os or Re, electroph., 1B167
from Ti, chrom., 5B127
from V, ion-exchange chrom., 3B115
solvent extraction of, with Aliquat 336-S, 5B73
with heptanoic acid in presence of aliphatic amines, 2B22
with hexafluoroacetylacetone - dibutyl sulphoxide or tributyl phosphate, 2B47
with high-mol-wt. amines from cyanide soln., 5B72
with metal dithiocarbamates, 5B1
sorption of, on $Al(OH)_3$, $Fe(OH)_3$ and $La(OH)_3$, 2B17
Zinc, reagents for, crystal violet - I^- (or SCN^-), 5B70
dithizone, 2B15, 6B10, 6B206
5-ethylamino-2-(2-quinolylazo)-*p*-cresol, 3B50
4-ethyl-2-(2-thiazolylazo)phenol, 3B14
8-mercaptoquinoline, 1B179
1,10-phenanthroline - Rose Bengal B, 5B69
poly-(8-hydroxy-5-vinylquinoline), 6B12
1-(2-pyridylazo)-2-naphthol, 3B12
3-salicylidenedithiocarbazic acid methyl ester, 1B44
8-(toluene-*p*-sulphonamido)quinoline, 1B12
Zinc alloys, see also *Brass*
detmn. of elements in, by a.a.s., 3B6
Zinc complexes, with aliphatic hydroxamic acids, 6A8
with 2,2′-dichlorodithizone, 5A9
with mono- and di-hydrazones of benzil and 2,2′-pyridil, 5A10
with thiosemicarbazide, detmn., volum., 6A9
Zinc iodide, detmn., by thermom. titration, 4C25
Zinc ores, control of pulps used for flotation of, 6B37
detmn. of In in concentrates of, spectroph., 4B52
of Pb and Zn in, polarogr., precision and accuracy of method for, 5B71
granulation and reduction of bulk samples of Zn - Pb sulphides, 4B37
Zinc oxide, detmn. of excess of Zn in, electrochem., 2B48
Zinc salts, detmn. in aq. soln., by β-ray back-scattering, 5B18
of Pb in, fluorim., 5B74
of Th in, concn. by co-pptn. for, 1B69
Zinc silicon arsenide, detmn. of Se in Se-drifted, stripping voltamm., 6B162
Zinc sulphate, detmn. of Cd in, anodic-stripping voltamm., 2B50
Zinc sulphide, detmn. of Sb, Bi, Cd, Cu and Pb in, anodic-stripping voltamm., 4B36
of S in semiconductor, gravim., 5B159
Zineb, amine content of commercial formulations of, 5G29
detmn. in presence of thiram and ziram, or in Thiodyl formulations, i.r. spectroph., 2G24
Ziram, amine content of commercial formulations of, 5G29
detmn. in presence of thiram and zineb, or in Tuzet formulations, i.r. spectroph., 2G24
Zircaloy, detmn. of O in surfaces of, by charged-particle activation, 3B101
Zircon, detmn. of Hf-to-Zr ratio in, X-ray emission spectrom., 3B100
Zirconium, concn., with use of three-phase extraction system, 1B11
detection in radiopharmaceuticals, colour reaction for, 6E40

conium—*continued*
letmn., fluorim., 1B97
comparison of reagents for, 3B97
gravim., 1B13, 5B129, 5B130
photom., 1B96
spectroph., 2B17, 4B82, 6B139, 6B140
comparison of reagents for, 6B138
in alloys, fumes or slags, by n.a.a., 3B99
in cobalt salts, with concn. by co-pptn., 4B157
in ^{113m}In - Cl extracts of pharmaceutical products, spectroph., 3E45
in lanthanum or lanthanum oxide, spectrogr., 1B65
in lead - zirconium titanate ceramics, complexom., 6B237
in minerals, ores or rocks, spectrogr., 6B13
in nickel salts, with concn. by co-pptn., 4B157
in presence of Hf, by spectroph. titration, 3B96
of Th, photom., 6B92
in radiopharmaceuticals, spectroph., 6E40
in sediments, *in situ* X-ray emission spectrom., 6H25
spectrogr., 2H17
in silicates, X-ray emission spectrom., 4B67
in steel, emission spectrom., 1B144
in thoria, X-ray emission spectrom., 6B93
in titanium alloys, spectroph., 3B98
in water, in presence of Nb, Tc and Te, sepn. scheme for, 6B21
of concn. of vapour of, during electron-beam melting, emission spectroph., 5B24
of Hf in, by isotope dilution, 2B87
of Hf-to-Zr ratio in zircon, X-ray emission spectrom., 3B100
of H in, spectrogr., 6B137
of Fe in, by electrolysis - a.a.s., 2B88
of N in, by Kjeldahl distillation - coulom., 4B83
of O in, comparison of methods for, 5B155
of ^{95}Zr and ^{97}Zr in fission-product soln., γ-spectrom., 6B141
sepn. from Eu or Tm, by ion exchange, 4J13
from Hf and other elements and detmn., with use of diantipyrinylmethane deriv., 1B98
from Hg, by solvent extraction, 6B67
from other elements, by ion exchange, 6B143
ion-exchange chrom., 6B142
solvent extraction of, with amine oxides, 3B80
Zirconium, solvent extraction of—*continued*
with amines, 5B153
with 2-bromobutyric acid, 4B79
with *NN*-disubstituted amides, 6B17
with esters of dithiocarbamic acids, 4B2
with O-containing solvents from aq. HF media, 4B102
sorption of ^{95}Zr from U-containing soln. on tin(IV) phosphate, 1B78
Zirconium, reagents for, alizarin, 6E40
calmagite, 6B138
Chrome Azurol S, 6B138
3-diethylamino-2-[3-(1-methyl-2-piperidyl)-2-pyridylazo]phenol, 1B96
gallic acid, 5B129
gallion, 6B138
hippuric acid, 5B130
4-(2-hydroxyphenyliminomethyl)resorcinol, 1B97
4-methoxy-*N*-*m*-tolylbenzohydroxamic acid, 1B13
morin, 3B97, 6B92, 6E40
4-(4-nitrophenylazo)catechol, 4B82
purpurinsulphonic acid Na salt, 6B140
4-(2-pyridylazo)resorcinol, 6B138
quercetin, 3B97
quercetinsulphonic acid, 3B97, 6B139
Solochrome Black 6B, 6B138
Solochrome cyanine R, 6B138
thoron I, 6B138
2,6,7-trihydroxy-9-(2-quinolyl)xanthen-3-one, 2B17
zirconin, 3B98
Zirconium alloys, see also *Zircaloy*
detmn. of H in, spectrogr., 6B137
of Mo in, spectroph., 2B120
—, **Zr - Al,** phase analysis, and electrochem. dissolution of, 5B19
Zirconium carbide, detmn. of C in, emission spectrom., 5B131
Zirconium nitride, detmn. of N in, by He extraction - g.c., 5B156
Zirconium(IV) oxide, detmn. of B and Cd in, in presence of Cr, Fe and Ni, spectrogr., 1B100
of O in, by He extraction - g.c., 5B156
of Ta and W in, spectrogr., 1B99
Zirconium phosphate, thermoanalytical study of various forms of, 5A6*C*
Zirconium silicide, d.t.a. of, 5A6*C*

AUTHOR INDEX

Readers should note that, in this index, all diacritical marks have been omitted from authors' names. The German ä, ö, and ü and the Scandinavian ø (or ö) have been translated as ae, oe, ue and oe respectively. Patents are indicated by *P*, and conference papers and books by *C* and *B*, respectively, after the abstract number.

Aamodt, L. C., 5J70
Aaroe, B., 6E4
Aaron, C. S., 1J85
Aaron, J. J., 4J49
Aaviksaar, A., 5C23
Abbass, K., 6D14, 6F2
Abbey, S., 4B168
Abdallah, A. M., 4B113, 5B162
Abdeddaim, K., 4J20
Abd El Fattah, M. M., 1E24
Abdel-Rahman, M. O., 1H37
Abd El-Salam, N. A., 1E12
Abdel-Wahab, S. M., 4E15
Abdisheva, A. V., 6B151
Abdukadyrova, I. Kh., 4B49
Abdullaev, Sh., 3G27
Abe, F., 2D87
Abe, Shigeki, 6B188
Abe, Shuhji, 4B45
Abe, Y., 1H27
Abel, K. H., 3B170
Abel, R. H., 2B110
Abelard, P., 2J77
Abenza, J. M., 1D43
Abiko, M., 6B172
Aboulwafa, O., 5B128
Abrahamsson, L., 4A1*C*
Abramov, V. V., 6B232
Abramyan, A. A., 5C7, 6C2, 6C3
Abu-Samra, A., 3D5, 5A5*C*
Ace, L. N., 2D42
Achar, B. N., 1B171
Achari, R., 4A2*C*
Ackerman, J. L., 2J104
Ackermann, G., 3B121
Ackman, R. G., 4F33, 5F67, 6F28
Actor, P., 2E19
Adachi, K., 4C16
Adachi, T., 1B109, 3B85
Adam, J., 5B125
Adamek, A., 3B69
Adamiec, I., 5B147
Adams, E. T., jun., 2A5*C*
Adams, F. C., 5H2
Adamski, J. M., 2H34
Adam'yan, R. I., 4H36
Addicks, H. W., 3D46
Adel, M. S., 1D77
Adelman, M., 1C74
Adessi, G., 1E20
Adler, F., 3B117
Adler, H., 2A1*C*
Adlercreutz, H., 2A3*C*, 4A1*C*, 6D50
Adrouni, S. M., 5B106
Afanas'ev, M. I., 1C60, 5C44
Afanas'eva, L. I., 4B72
Afanasiadi, L. I., 5J45
Afghan, B. K., 3H23
Afremow, L. C., 2C76
Agaeva, M. A., 6J16
Agafonov, I. L., 3C35
Againa, S., 2E20
Agarwal, M., 1D5
Agarwal, R. C., 1B12
Agasyan, P. K., 1B86, 2B80, 2B82, 5B137
Ageeva, L. V., 5B94
Agemian, H., 2J86, 6H26
Agilov, V. A., 4B59
Agrawal, A. K., 3J8
Agrawal, Y. K., 1B42, 1B106, 4B116, 5B101, 5B102
Agrinskaya, N. A., 5B153
Ahlberg, M., 3B150, 5A5*C*
Ahlers, G., 3E6
Ahlstrom, D. H., 2A1*C*, 3H12
Ahmad, S., 5B109
Ahnoff, M., 4H33
Ahrend, K.-F., 6D33
Aiginger, H., 1B119
Aihara, M., 3D14, 3D27, 6B171
Aikens, D. A., 2B111
Ailloud, P., 5B169
Aitkhozhaeva, T. A., 6B226
Aitzetmueller, K., 2D76, 5F66
Akaiwa, H., 5H18
Akashina, V. F., 5B184
Akerkar, A. S., 1D60
Akhmedli, M. K., 6B71
Akhmedov, Kh., 5B208
Akiba, M., 4B150
Akimova, T. G., 2B113
Akitt, J. W., 5J66
Akiyama, J., 6J13
Akselsson, R., 3B150, 5A5*C*
Aksenova, A. R., 4C95
Aladjem, A., 2B88
Alaerts, G., 5H13
Alaerts, L., 4B50
Al-Babbili, O., 5A2*C*, 6A1*C*
Albain, J. L., 2J128
Albaugh, E. W., 3J16
Albrecht, B. H., 1D56
Albrecht, L. S., 2A1*C*
Albrecht, M. E., 4G15
Albrecht, W., 1B167, 1H25, 2B4
Aldous, K. M., 1H33, 2A1*C*, 2H18, 3J60
Aleksander, I., 5J80
Aleksandrov, S., 3B42, 4B3
Aleksandrov, V. N., 1C32, 1C39
Aleksandrov, Yu. I., 5C1
Alekseeva, D. P., 6B102
Alekseeva, I. A., 6B215
Alekseeva, I. I., 2B155
Alekseeva, K. V., 4C92
Aleksiev, A., 4D2
Ales-Barrero, F., 6A12, 6B148
Alex, W., 1J92, 5J115
Alexander, P. W., 4B119
Alfimova, L. D., 5B203
Alfons, H., 6J19
Alford, A. L., 2A7*C*
Ali, A., 1B74, 2B134
Ali, A. S., 6B189
Alian, A., 3B70, 6B130
Alishoev, V. P., 1C80
Ali-Zade, T. D., 5B185
Allart-Demul, C., 5A3*C*
Allebone, J. E., 1D35
Allen, C. F., 3C63
Allen, R. O., 2B9
Allendoerfer, R. D., 1J58
Alley, C. C., 6D38
Alliet, D. F., 5A7*C*
Allison, J., 5D26
Allkins, J. R., 2J81
Allner, R., 3D82
Allsalu, M., 5B62
Almgren, T., 4H34
Alonso, E. J., 6B196
Alonso, M. R., 4A18
Al-Shahristani, H., 6D14, 6F2
Al-Sibaai, A. A., 3B111
Altemose, V. O., 2A1*C*
Alvarez-Manzaneda, E., 6B140
Alvarez-Nazario, F., 6A4
Alvarez Rodriguez, R., 1B125
Alvarez Sotolongo, M., 4E8
Alvin, J. D., 1D20
Aly, H. F., 1B71, 6B91
Aly, O. A., 1H37
Alyabyeva, M. S., 1C48
Al'yanov, M. I., 5D81
Alybina, A. N., 5B65
Alykov, N. M., 4B43
Ambroziak, W., 6F7
Amer, M. M., 1E15, 2E17, 3E20
American Society for Testing and Materials, 2H48*B*, 2J45*B*, 3J16, 5H47*B*
Amiel, S., 3B79, 5A5*C*
Amin, M., 1D45
Amin, M. N., 4C53
Amirjahed, A. K., 1E41
Ammann, D., 5J91
Amoss, C. W., 1C47
Anbar, M., 5H17
Anders, M. W., 3D70
Anders, U., 2F6
Andersen, C. A., 4B70
Anderson, C. E., 1C67
Anderson, D. G., 2C76
Anderson, E., 6A1*C*
Anderson, J. T., 1D52
Anderson, J. W., 2D55
Anderson, M. E., 2F17
Anderson, N. G., 1J5
Anderson, N. L., 1J5
Anderson, S. A., 2H11
Anderson, W. H., 5D50
Anderson, William L., 2D115
Anderson, Wilma L., 1E44
Andersson, A., 3G6
Ando, T., 6C27
Andrade, P., jun., 5G33
Andrawes, F., 6A1*C*
Andre, L., 5F38
Andreev, P. A., 6B232
Andreev, V. K., 3B115
Andreeva, T. D., 3B41
Andren, A. W., 5A5*C*
Andres, R. F., 1J95
Andreyanov, A. D., 6B227

rianov, V. F., 1C39
rievskii, V. N., 4B160
ronikashvili, T. G., 1J21, 2C12
rushko, G. S., 1B55, 1B97
ryauskas, S., 1D18
rzejewska, E., 2F24
lt, T., 1J72
eli, A., 6D52
ell, C. L., 2A1*C*
ell, G., 6B204
elo, H. R., 4A1*C*
erer, J., 5A3*C*
gard, E., 4D24
us, W. W., 3C36
kin, A. G., 4C27
simov, A. F., 4J26
simov, Yu. N., 6B123
simova, L. G., 2B49
simova, Z. A., 1B100, 5B131
stratenko, G. A., 6B220
aneyulu, T. S. R., 5G9
onescu, L., 3B66
onovich, V. P., 2B17
aer, B. I., 5C42
var, J., 1B74, 2B134
var-ul-Islam, M., 6B202
z, F., 1J94
enbacher, P., 2J9
i, Y., 5G34
daca, A. O., 4G29
litskii, V. N., 2B158
n, J. M. B., 5D49
alaraju, N., 6B195
le, G. D., 3A1*C*
leby, A., 1H8
lied Research Laboratories
nc., 3J52*P*
lied Research Laboratories
td., 3J55*P*
, K. E., 2B157
bacioglu, F., 5D39
ki, S., 1H43
s, N. K., 1D9, 3B170
ner, A. W., 1C85, 4H27
. J. S., 2A1*C*
nkova, G. G., 1J22
ov, L., 4B67
zawa, Yoshijiro, 6B8
zawa, Yoshiko, 3B119
cc, F., 5A5*C*
nangel'skaya, A. S., 1B54
nangel'skaya, E. D., 4D67
nipov, N. A., 5J42
nger, L., 6A2*C*
iisen, F., 1F21
strong, D. E., 3H26, 5H28
strong, F. A. J., 2A4*C*
strong, G. T., 2A1*C*
strong, J. T., 6J36
er, P., 6D70
old, R. E., 4F18
nsson, T., 4A1*C*
ra, K. L., 4D39
no, P. J., 3J15
bola, A., 6A10
tt, J. M., 6B218
yo, M., 3D13
mova, O. A., 3C50
mova, T. N., 2B120
a, S. P., 5B151
oe-Hansen, G., 1D68
aeri, S. M., 3E33
k, K., 3B136
one, P. P., 1E27, 2G18

Asher, C. J., 1G10
Ashes, J. R., 3C19
Ashikhmina, G. P., 6C82
Ashitani, S., 1C42
Ashmead, H., 6D4
Ashraf, M., 5B109
Askari, A., 1D104
Aslanova, F. T., 6B71
Aso, T., 2H30
Aspila, K. I., 2A13, 2J86
Aspnes, D. E., 2A11
Assenmacher, H., 5C5
Asshauer, J., 6A1*C*
Astaf'eva, I. N., 2B102
Aston, J. W., 5J21
Astrug, A., 1C23
Astrup, J., 4A1*C*
Atakuziev, A. A., 3G27
Atashyan, S. M., 6C2
Atkinson, A. J., jun., 3J47
Atsumi, K., 1D65
Attolini, G., 1B50
Attrill, J. E., 1J5
Atuma, S. S., 6E15
Atwood, J. G., 5A2*C*
Aue, W. A., 1J23, 3G33, 3J32, 6A1*C*, 6J17
Auer, S., 5J75
Auffret, L., 5B99
Augustin, H., 1J12
Augustowska, Z., 5J88
Augustyn, W., 5B33
Aurich, F., 1J29
Austern, B. M., 1H47
Auterhoff, H., 3E6, 5E18
Avadhanulu, A. B., 1A4
Avaev, V. I., 2B129
Avdeeva, G. F., 6B222
Avery, J., 3J67
Avni, R., 2A1*C*
Aw, S. E., 3D127
Awad, N. S., 5E32
Awdeh, Z. L., 6A2*C*
Axelrod, H. D., 1B103, 6H8
Ayer, L. G., 5H10
Ayres, G. H., 4B161
Aziz, A. A., 2C41
Azzaro, M., 2C67

Baba, S., 1J78, 2C7
Baba, Y., 1J78
Babakhodzhaev, S. M., 4B124
Babb, A. L., 6A3*C*
Babb, H., 2J1
Babeliowsky, T., 4B20
Babenko, N. L., 6B153
Babic, J., 2H36
Babich, N. N., 3B93
Babkina, T. A., 5B215
Babushkina, T. V., 3B29
Bachman, A., 3J14, 5A2*C*
Bachmann, O., 5F57
Bachrata, M., 1E1
Back, M. H., 6C14
Baczyk, S., 1E25, 2E22, 2E24, 6E18
Badea, S., 6C65
Badinand, A., 3D44
Badings, H. T., 2A6*C*
Badzio, T., 4D44
Baechmann, K., 3B1
Baerheim Svendsen, A., 2E9, 5E6
Bag, S. P., 5B175

Bagbanly, I. L., 4B39, 5B82
Bagdasarov, K. N., 6B96, 6C18
Baggi, T. R., 4E34
Bagliano, G., 5B108
Bagreev, V. V., 4B102, 5B153
Bagshawe, B., 5B197
Bahadur, A., 5B18
Baidarovtseva, M. A., 6A1*C*, 6J16
Bailey, D. G., 4D30
Bailey, F., 2E39
Bailey, J. E., 5F42
Bailey, K., 5E17
Baille, A. M., 2D32
Bailon, P., 4D60
Baily, P., 2D19
Bains, G. S., 5G38
Baiulescu, G. E., 1E5, 3E7, 3J49*B*, 4B32, 6E1
Bajer-Rapic, B., 2G34
Bajkowski, A. S., 4D77
Bajo, S., 5B1
Bajpai, S. K., 1B68, 5B130
Bakale, D. K., 3J74
Bakardzhieva, D. I., 4B78, 4B147
Bakay, B., 5A2*C*
Baker, C., 6J46
Baker, D. R., 2A1*C*
Baker, F., 2D53
Baker, J. D., 2A7*C*
Baker, K. F., 2G1
Baker, R. W., 2B24
Bakhitov, M. I., 6C35
Bakhramova, N. P., 3B52
Bakken, H., 4A1*C*
Balabanov, V. V., 5B114
Balagna, J. P., 5B43
Balakireva, N. A., 5B58, 6B29
Balan, L., 2E42
Balasiewicz, W., 4C34
Balaux, N., 4J17
Balcerska, M., 1H41
Balcerzak, M., 1B40
Baldini, G., 5J54
Baldridge, J. N., 4D81
Baldwin, J. R., 6J68*B*
Balek, V., 5A6*C*
Baletskaya, L. G., 2B83
Balica, G., 2E42
Balinova, A., 3G26
Balint (nee Novotny), A., 2E56
Balke, J., 1D7
Balkovetz, F. J., 2A7*C*
Ball, D. F., 4F1
Ball, F. L., 1J5
Ball, J. W., 5B182
Ballarin, J., 1E50
Balogh, S., 4C18
Balta, E., 4C50
Balta, P., 4C50
Baltakmens, T., 2G5
Baltisberger, R. J., 2B51
Balyatinskaya, L. N., 6B6
Banakh, O. S., 2C12
Banateanu, G., 6C65
Bancroft, M. F., 2A1*C*
Bandi, P. C., 5D52
Bandurski, R. S., 2D104
Bandyapadhyay, G. K., 6D41
Bandyopadhyay, C., 3F14
Banerjee, G., 6H39
Banerjee, S., 3C46
Bangert, F. K., 6E12
Bangerter, B. W., 1J55
Bannerman, R. T., 3H26

Barakat, M. F., 3D92
Barannik, I. D., 6J21
Baranov, A. A., 6B35
Barasheva, T. V., 6B137
Barber, M., 4F1
Barbero, L., 5G29
Barbiera, J. P., 2C17, 4C11
Barclay, A., 5J58
Bard, A. J., 6J74*B*
Barden, R. E., 2C64
Bardin, M. B., 5B213
Barek, J., 1C38
Barengo, R., 1D89
Barica, J., 2A4*C*
Bark, L. S., 2A1*C*
Barker, B. J., 4C2
Barker, G. R., 3G3
Barker, T. B., 5A7*C*
Barna, K., 3D33
Barnett, W. B., 2A1*C*
Barollier, J.-P., 4F32
Barrandon, J. N., 3B158
Barrett, P. C., 5E9
Barry, E. F., 1B112, 2B109, 2J36
Barry, T. L., 2J76
Barsotti, L. R., 3H14
Barsukova, K. V., 1B78
Bartelmus, G., 4C68
Bartels, P. C., 5D11
Bartha, L. G., 6C50, 6C96
Bartonek, J., 2H12
Bartram, P. N., 3A1*C*
Bartschmid, B. R., 2A1*C*
Bartusek, M., 3B47
Bartzack, C., 2D78
Barve, V. P., 6E17
Basargin, N. N., 2B85
Basceanu, M., 3H46
Basinska, M., 2B140
Basso Dastugue, H. A., 1E36
Basson, W. D., 1G2
Bastenier, H., 5A3*C*
Bastiaans, G., 2A1*C*
Bastos, M. L., 1D18
Bate, L. C., 5A5*C*
Bath, D., 2A1*C*
Batora, V., 2G27
Batten, C. F., 6A1*C*
Battilotti, M., 6B30
Baudras, A., 5D45
Bauer, D., 6A18, 6B98
Bauer, E., 4J42
Baum, R., 3J54
Bauman, W. C., 5J17
Baumann, E. W., 1J71
Baumann, G., 1J13
Baumann, P., 2D93
Baun, W. L., 1J64
Bauschke, S., 5D74
Bayer, E., 2D97
Bazard, D., 3F32
Bazin, Yu. A., 6B143
Beasley, T. H., sen., 4E11
Bebris, N. K., 3J33
Becker, D., 2D150
Becker, D. A., 3D24, 5A5*C*
Becker, E. D., 2A1*C*
Becker, F. F., 1D97
Becker, G., 1J59
Becker, H., 2B142
Becker, M. A., 1D60
Becker, N., 2J12
Becker-Ross, H., 3B137
Beckett, A. H., 4A2*C*, 6D29
Beckey, H. D., 1J61
Beckman, D., 1A1*C*
Bedard, M., 2B32
Beech, F. W., 5F56
Beech, G., 3A15*B*
Begak, O. Yu., 4B118, 5B134
Begnoche, B. C., 2H7
Beguin, F., 2B74
Begun, G. M., 1J42
Behera, S. K., 5J85
Behne, D., 5A5*C*, 6A2*C*
Behnert, J., 3D3
Behr, B., 5C33
Behringer, K., 4J43
Beiser, C., 2E36
Beitler, U., 6A1*C*
Beitz, L., 5A3*C*
Bejan, C., 1C4
Belabbes, R., 4J20
Beland, F. A., 1H20
Belanger, B. G., 6D42
Belcher, C. B., 4B169, 5B193
Belcher, R., 2A1*C*, 2B99, 2B101, 2B114, 5B158
Belenkii, B. G., 1C73
Belen'kii, B. V., 6B229
Belganger, P. M., 6D29
Bell, D. R., 2H8
Bell, R. M., 3D133
Bell, S., 2F36
Bellar, T. A., 2A4*C*
Belleau, G., 4A3*C*
Bellegay, R. D., 2A4*C*
Bellomo, A., 2H15
Belova, T. Ya., 6B149
Bel'skaya, G. F., 3G43
Bel'tyukova, S. V., 4B54, 6B83
Belvedere, G., 4D25, 4E45, 6A1*C*
Belyaev, Yu. I., 4B12, 6J51
Belyustin, A. A., 3G7
Bembi, R., 1B117, 3B145
Benaben, P., 3B158
Benada, J., 2B53
Benard, M., 5F50
Bencze, K., 4F8
Bende, E., 5F53
Bender, A. D., 2E16
Bender, D. F., 1H45
Benedek, A., 3H45
Beniaminova, S. M., 2B50
Benischek, F., 5B108
Bennert, W., 5J117
Bennett, R. B., 1D5
Benson, R. L., 6C22
Bentejac, R., 6C93
Bentley, G. E., 3J58
Ber, A., 2D123
Beran, Z., 4J2
Bercht, C. A. L., 1E9
Berck, B., 3G47
Berengard, I. B., 6B149
Berenguer, M. C., 6A10
Berenice, G., 1B175
Berens, P. H., 2C52
Berezkin, V. G., 1C53, 1C80, 3C8, 3C50, 3J33, 4J26, 6A1*C*
Bereznai, T., 4B125
Berg, O. E., 5J75
Berger, R. L., 2A1*C*
Berger, S. L., 2D159
Bergman, I., 5D4
Bergmeyer, H. U., 5D85
Bergstroem, K., 4A1*C*
Berka, A., 1C38, 4B21
Berkeley, R. C. W., 1D102
Berkenstadt, Y., 1D67
Berkes, I., 5D93
Berlin, A., 5A3*C*
Berliner, L. D., 4B167
Berlyne, G. M., 1D67
Berman, M. R., 2D75
Berndt, H., 5J5
Bernofsky, C., 3D109, 4D65
Beroza, M., 3G51
Berry, D. J., 5D21
Berry, P. F., 6A3*C*
Bertels, P. C., 2J89, 2J90
Bertsch, W., 6A1*C*
Bertsev, V. V., 5J57
Beschetnova, E. T., 2B49
Beseda, A., 4B84
Besnard, M., 3B140
Bespal'kova, I. A., 5B65
Bessarabova, I. M., 5B177
Best, G. A., 4A4*C*
Bettencourt, A., 5D41
Beutler, E., 2D151
Bevan, D. G., 1B91
Bewers, J. M., 2A4*C*
Beyer, H., 5J123
Beyer, N. S., 6A3*C*
Beyer, W. F., 4J8
Beynon, H. J., 5J78
Beynon, K. I., 6H45
Beyrich, T., 5E1
Beyrich, W., 2A7*C*
Bezazyan, I. V., 5B32
Bezuglyi, V. D., 1C52, 6H53
Bhakdi, S., 6A2*C*
Bhandari, M. R., 4B25
Bhardwaj, T. R., 6E36
Bhargava, O. P., 2A4*C*
Bhaskare, C. K., 1B172, 5B200
Bhatia, S. P., 5H8
Bhatt, Y. N., 3B113
Bhattacharya, A. K., 2A1*C*
Bhattacharyya, A. K., 3D85
Bhattacharyya, D. K., 5D7
Bhattacharyya, K., 5B138
Bhatti, H. B., 1B126
Bhuchar, V. M., 3J8
Bianchi, D., 3J71
Bianchi, F., 4B146
Bibby, D. M., 3B99, 5B118, 6B4
Biber, B. L., 6C76
Bichon, C., 3D44
Bicknell, D. C., 3D80
Bickoff, E. M., 4G14
Bieber, W.-D., 2C81
Biehl, E. R., 1E40
Bielech, M. F., 4E43
Biggs, D. L., 3A4
Biggs, J. S. G., 6D48
Bigham, D. A., 5D46
Bighley, L. D., 3D41, 4E39
Bijl, J. A., 4B105
Bilba, D., 6B72, 6B81
Bilenko, N. S., 5B69
Bills, D. D., 2G36
Binder, A., 3F37
Bindra, T., 3B95
Binks, J. H., 5J58
Biondi, P. A., 2C19
Birch, K. N., 2A4*C*
Birden, J. H., 6A3*C*
Birger, G. I., 1B37
Birks, J. B., 2J157*B*
Birnbaum, M., 1H10

, C., 6D60
en, G., 5J94
uk, E. A., 2B60
occi, D., 6D52
hara, R. H., 2E47, 3J27, 6C48
op, D. M., 6A3*C*
op, J. A., 2B46, 2B93
op, R., 1D66
gnani, M., 5C12, 5C13
ett, D. W., 2A1*C*
erlin, E., 1C36
ića, L. J., 1C3
erkhem, I., 1D34, 1D57, 4A1*C*
ernstad, P., 4A1*C*
k, J. N., 2B24
kmore, P. F., 3D54
edel, W. J., 2J134, 3B32, D108
gojevic, Z., 5E31
gondravova, A. A., 6C88
grove, R. J., 4D61
na, J. M., 4E21
r, A. D., 3D48
r, A. J., 2B28
r, D. P., 2J55
s, R., 4J17
ke, M. I., 1E41, 4E28
kemore, W. S., 1D14
nc, B., 2F23
nchard, B., 2B162
nk, A. B., 5J45, 6B92
nshard, J. M. V., 6F16
nshard, K. C., 2D99
sier, R. B., 2A1*C*
sius, E., 1J12, 3J17, 5J15
u, C. A., 4A5*C*
u, K., 6D43
zejewska, B., 6D37
zek, A., 5A6*C*
zek, J., 1E32, 3E36
zevic, N., 2E37
ss, B., 2D127
ssington, B., 4A1*C*
ffert, C., 6J69
ckeel, E., 6J15
kh, M. Sh., 6B153
mberg, L., 2J37
mqvist, P. O., 2B139
mstrand, R., 1D34
od, E. R., 3F3
om, E. E., 2A1*C*
om, H., 5H5
om, P. J., 5F10
s, G., 2A6*C*
cky, A. J., 5A5*C*
. G., 6A1*C*
cher, W. G., 5H17
m, K., 2D36, 3D40, 6D17
menkrantz, N., 1D68
mer, N., 4B108
. D. D., 2A1*C*, 5J11
um, I. A., 5B7
er, H., 5D66
ek, P., 2A6*C*, 2J24
henin, V. I., 5B218
hkarev, B. N., 6B42
hkareva, I. A., 5B7
e, D. W., 4E28
e, P., 3J92
kin, J. B., 6B121
rogi, L., 3D83
ziony, J., 6J75
hlen, P., 2D116
hmer, R. G., 1G2
Boehnke, H., 2F16
Boesche, D., 1B167, 1H25, 2B4
Bogacka, T., 1H41
Bogatikov, B. F., 4B34, 4B65
Bogdanov, N. V., 6B127
Bogdanski, S. L., 2A1*C*, 2B99, 2B114, 5B158
Bogen, D. C., 1A1*C*
Bogentoft, C., 6D22
Bogoslovskaya, M. N., 1B37
Bogoslovskii, Yu. N., 1C84
Bogunovic, M., 5D8
Boguslaski, R. C., 4D63
Boguslavskaya, I. L., 6C54
Boiko, V. F., 2B1
Bois, G. V., 3B52
Boitsov, A. A., 2B63
Bojovic, T., 1J1
Bokelund, H., 1D1
Bokowski, D. L., 2H6
Bolker, H. I., 3C71
Bolleter, W. T., 1C83, 4C96
Bollini, M., 3C75
Bolton, N. E., 2A7*C*
Boltz, D. F., 3B37, 4B120, 5B22, 5B170, 6B176
Bomer, K. A., 2E54
Bonar, L. C., 2A1*C*
Bonastre, J., 3C31
Bonchev, P., 6E11
Bondareva, N. V., 5B28
Bondarevskaya, E. A., 5C25, 6B23
Bonevski, R., 2G31
Boniforti, R., 4B63
Bonino, F., 1F4
Bontems, P., 5J121
Bordachuk, L. S., 1C53
Bories, G. F., 3G19
Borisov, V. N., 6A1*C*, 6H15
Borisova, L. V., 2B130
Borisova, R., 5B53, 5B56
Borka, L., 2J98
Borkovcova, I., 2J31
Borkowski, C. J., 2J148
Born, E. C., 4F18
Born, H.-J., 3J18, 5A5*C*
Bornschein, I., 1D19
Bornschein, M., 3E23
Borodkin, V. F., 5D81
Borowiecka, J., 1B162
Borsdorf, R., 1C44
Borvenko, V. V., 4H46
Boryak, A. K., 5B51
Borys, W., 2E31
Bos, P., 1H23
Bosch, M. W., 3D79
Bosch Reig, F., 5B3
Bose, P. K., 1F5
Bose, S., 1C13, 1C14, 2B73
Bosset, J., 2F23
Bostick, D. T., 3D18, 6G7
Bostick, W. D., 2A1*C*, 5A2*C*
Boswell, G. G. J., 6J64
Botes, S. J., 4J5
Botha, D., 6D15, 6D16
Boudou, A., 2D10
Bouldin, D. R., 4H25
Boumans, P. W. J. M., 4J45, 5J46
Bourdillot, M., 3J78
Bourdon, R., 3E3
Bourgeois, C. F., 4G13, 5F72
Bourke, E., 4D35
Bournot, P., 6A1*C*
Bourque, C., 2B34
Bovay, M., 6B165
Bovey, F. A., 3J72
Bowen, D. V., 1E48, 6J65
Bower, N. W., 6J35
Bowers, J. A., 1F11
Bowers, L. D., 2A1*C*
Bowes, G. W., 3C92, 6C99
Bowles, J. F. W., 6J38
Bowling, S. S., 1G4
Bowman, M. C., 2D56, 3G50
Bowman, W. W., 2J152
Box, T. C., 4A3*C*
Bozic, J., 6B26
Braca, G., 6C8
Bradford, H. F., 2D99
Bradley, A., 4C82
Bradshaw, J. S., 3H10
Brady, R. F., jun., 3C1
Braekkan, O. R., 5F6
Braetter, P., 3B51
Brain, K. R., 2E55
Brainina, Kh. Z., 6B15
Braman, R. S., 5A3*C*
Brambati, E., 1F4
Brame, E. G., jun., 2A1*C*
Brancaleoni, E., 2A6*C*, 6H4
Brand, H. P., 6E7
Brandenburg, R. A., 4B35, 4J4
Brandone, A., 5A5*C*
Brandstetr, J., 5A6*C*
Brandt, I. K., 6D42
Brandt, P. E., 3F46
Brannon, W. L., 4E16
Brassard, C., 5B154
Braun, D., 4C84
Braun, M., 5E28
Braun, T., 3J48*B*, 4A17
Braunitzer, G., 2D127
Brauw, M. C. ten N. de B., 2D89
Bravina, N. N., 3C90, 6C90
Brazdil, P., 5B187
Brazell, R., 6A1*C*
Breck, W. G., 2A4*C*
Breckenridge, G., 2D13
Breder, C. V., 5C55
Bredesen, J. E., 4A1*C*
Brenner, I. B., 4B67
Brenner, M. W., 4A3*C*
Bressan, D. J., 6H3
Bressolle, F., 3D66
Bretherick, L., 2A22*B*
Breuer, H., 2A3*C*
Brewer, A. D., 4A23
Breyer, U., 1D22
Brhacek, L., 1B153
Bricard, J., 1J96
Brickey, P. M., jun., 5F20
Bridges, J. W., 3E37
Briggs, T. N., 6A16
Brilmyer, G. H., 6J9
Brindle, M. P., 6J5
Brink, H., 2C30
Brinkman, D. W., 2A1*C*, 2J83, 3J62
Briotta, D. A., jun., 5J64
Brisgunov, V., 1D78
Briska, M., 4B15
Briskey, E. J., 5F26
British Carbonization Research Association, 3C57, 3C58
British Coke Research Association, 4C56
British Petroleum Co. Ltd., 3J55*P*

British Standards Institution, 1C58, 1C61, 2B161, 2C84, 2D18, 2J162, 3B30, 3B120, 3B173, 5B136
Britske, M. E., 5B42
Brittain, P. N., 2E39
Britten, A. Z., 1E10
Broddin, G., 3B105
Brodtmann, N. V., jun., 5H37
Bromberg, F. G., 2D162
Bronsgeest, J. M., 3G17, 4F9
Bronson, F. L., 1A1*C*
Brooking, K. A., 5B193
Brooks, C. J. W., 6A1*C*
Brooks, G., 4D47
Brooks, H. B., 1D14
Brooks, J. B., 6D38
Brooks, M. A., 2A1*C*, 5D17, 5D22, 6C10, 6D25
Brooks, R. R., 1A2
Brooksbank, P., 6H37, 6H42
Broquaire, M., 2J19
Broun, G., 2J138
Brouwer-de Boer, S. H., 5D30
Brouwers, J. R. B. J., 6E5
Brower, C., 6J18
Brown, C. W., 2A1*C*, 3C52
Brown, F. W., 1G8
Brown, H. R., 6H40
Brown, M. E., 5C55
Brown, M. J., 3C3
Brown, P. R., 2A1*C*, 6A1*C*
Brown, R. A., 5A1*C*
Brown, W. B., 4C88
Browne, P. G., 4J34
Brubaker, J. H., 5A4*C*
Bruckenstein, S., 1J58
Bruckner, K. J., 1F15
Bruel-Groleas, A., 3D57
Bruening, W., 6A1*C*
Bruk, B. S., 1B37
Brumhead, D., 3B148
Brun, J.-C., 2B162
Brun, S., 5F58
Brune, D., 3B101, 3B150
Bruner, F., 2A6*C*, 6H4
Bruninx, E., 1J84, 6H31
Brunn, J., 3C76
Brunnemann, K. D., 3D17
Brunngraber, E. G., 3D30
Bryant, M. F., 6J50
Brynes, P., 1E48
Bryson, W. G., 2B19
Bryson, W. R., 4A21
Brzozowski, S., 3J10
Bubernak, J., 2A7*C*, 2B70
Buchet, J. P., 5A3*C*
Buckee, G. K., 4F28
Buckley, D. E., 2A4*C*
Bucsky, G., 5J116
Budavari (nee Barany), Z., 2E46
Budde, W. L., 2A19
Budesinsky, B. W., 2B20, 4B143
Budevski, O., 1C23, 2E23, 3E5
Budinger, P. A., 2A1*C*
Budnikov, G. K., 6B111
Buehler, H., 2J132
Buehler, V., 3E29
Buell, B. E., 2C52, 3C56
Bueno de Mesquita, K. G., 4B105
Bufalini, J. J., 2A1*C*
Bugajewski, Z., 5A6*C*
Bugrova, V. D., 4B72
Buhl, F., 5B189
Buizer, F. G., 2G17
Buka, M., 4B86
Bukreev, Yu. F., 5B181
Buksak, D., 1H31
Bulaceanu, R., 6H29
Bulakh, E. L., 1C33
Bulanda, M., 6C73
Bulanin, M. O., 5J57
Bulenkov, T. I., 5B41
Bulgakova, A. M., 5B203
Bult, A., 6E22
Bultitude, F. W., 5A2*C*
Bulygin, B. M., 1C75, 4C95
Bunch, J. E., 1H14
Bundesgesundheitsamt, 4F11
Bundgaard, H., 4E44
Bundy, J. K., 1J87
Bunker, D. L., 5A5*C*
Bunus, F., 6H29
Buono, J. A., 6B12, 6J1
Buono, J. C., 6B12
Buonocore, V., 5D101
Buoy, M. E., 4D47
Burakov, V. S., 6B25
Burakova, T. P., 5C17
Buravlev, Yu. M., 6B201
Burchfield, H. P., 3G39
Burden, S. L., 1A9
Burdett, P. E., 5D97
Burdin, G. A., 3J44
Burenko, T. S., 5H14
Burg, W. R., 1J4, 6H16, 6H22
Burgess, C., 3B111, 5J55
Burke, M. F., 2A1*C*
Burlingame, A. L., 3C92
Burmicz, J. S., 3C25
Burnard, R. J., 3D52
Burnell, J. N., 4D74
Burns, D. T., 1B156, 1C68, 2A18, 3E37, 4A11
Burr, D. G., 2A1*C*
Burrell, D. C., 2A4*C*
Burridge, J. C., 5D1
Burse, V. W., 6G8
Bursey, M. M., 2C4
Burti, L., 4D25
Burtis, C. A., 5A2*C*
Burzio, L. O., 1D106
Buseck, P. R., 6J36
Buser, H., 1J19
Buser, H.-R., 6C58
Busev, A. I., 1B168, 2B153, 3G43, 4B2, 5B184, 5B204, 6B153
Bush, B., 2D53
Bush, L. P., 3G18
Bush, M. T., 1D20
Bush, W. J., 2A7*C*
Bushway, R. J., 4G40, 4G41
Busljeta, M., 5B115
Bussemas, H. H., 3D89
Bustin, D. I., 1B127
Butaeva, I. L., 4J23, 6A1*C*
Butina, I. V., 3J44
Butkiewicz, K., 6E42
Butler, C. C., 1B144, 2A1*C*
Butler, C. M., 5A2*C*
Butler, L. R. P., 3D100
Butler, R. A., 2B109
Buttery, P. J., 4G10
Buttler, G. W., 6A1*C*
Buyanov, N. V., 1B143
Buyanova, E. V., 5C25
Buzas, I., 5J114*B*
Bybee, R. L., 2J51
Byers, R. L., 1J106
Byfield, P. G. H., 3D91
Bykov, I. E., 1B105
Bylicki, A., 5A6*C*
Byr'ko, V. M., 1B165, 4B2
Bystroff, R. I., 1J45

Cabassy, J. P., 5D67
Cabon, J.-Y., 1J76
Cachard, A., 5A5*C*
Caddy, B., 3D43
Cagnasso, M., 2C19
Cahill, R. A., 6A3*C*
Cail, R. S., 4G39
Cain, P. M., 4C52
Calcagno, C., 2H28
Caldararu, H., 1C65
Caldes, G., 4C15
Caletka, R., 5B104
Callahan, J. A., 3A1*C*
Callicott, R. H., 2A1*C*
Callis, J. B., 4J50
Calo, R., 2E38
Calvey, R. J., 5F42
Camain, R., 2C67
Cambar, J., 2D10
Cameron, N. D., 5J58
Camp, D. C., 2H3
Camp, L. R., 6A3*C*
Camp, M., 5J80
Campanella, L., 3C38
Campbell, A. D., 1H11, 2C9, 3C3
Campbell, D. E., 1B178
Campbell, D. R., 3C79, 5C56
Campbell, E. E., 3B86, 3H7
Campbell, J. E., 5F13
Campbell, J. L., 3D7
Campbell, S., 6D43
Campbell, W. C., 4B77
Campo, M., 1G15
Campo, S., 1D55
Canada Centre for Inland Waters, 2H48*B*
Canadell, E., 1D47
Canales, A. M., 4A3*C*
Canetti, M., 6C80
Canh Tran-Minh, 2J138
Canic, V. D., 6B184
Cannella, C., 5D98
Canning, J., 6D48
Cano, J. P., 2D32, 4D29
Cantow, H.-J., 4C78
Cantrell, W. C., 6E12
Capitan Garcia, F., 5B60
Capomacchia, A. C., 2E44
Caravaggio, T., 6A2*C*
Cardillo, M., 2F8
Cardinac, C., 5B154
Cardinale, E., 2F5
Cardone, F., 6J41
Cardoso, J. N., 3J77
Carducci, C. N., 6J2
Carel, A. B., 4G2
Carey, R. N., 5A8
Carlisle, D., 1D3
Carlson, D. A., 5G33
Carlstrom, A. A., 5G35
Carnegie, P. R., 5D96
Carnevale, J., 6F22
Carola, C., 2F44
Carpenter, B. H., 1H14
Carr, G., 5E14
Carr, K., 2D71

P. W., 2A1*C*, 3H27
ll, D. I., 3G37, 6J66
ll, M. A., 2E16
on, J. W., 4C9, 4C10
well, A. I., 2A4*C*
well, D. J., 3B80
er, D., 4B68
er, D. C., 1A1*C*
er, J. A., 2A7*C*
er, M. H., 5A3*C*
er, M. J., 3H30
er, M. K., 2B33
er, M. W., 1A1*C*
er, P., 1D73
er, R. J., 1J75, 5D14
so, J. A., 2C31, 5F7, 6B7
er, J. C., 3B94
grande, D., 2E40
l, A. R., 3B75
le, A., 2H15
nova, J., 5J107
nova, J. L., 5J107
an, J., 2C67
att, W. A., 4J55, 5A7*C*
egnaro, M., 6F5
el, E., 6B34
ello, G., 1C20
ell Ripoll, J., 5B3
iglioni, M., 6B19
la, D., 5A3*C*
ey, R. D., 3G2
n, J. E., 1J5
rall, R. W., 1J70, 2J135, 3141
neanu, R., 1C4
de, M., 1E31, 3E35
let, C., 3J88
wet, G., 4H29
agnat, R., 2J79
allini, D., 6D63
an, D., 5J85
anaugh, J. R., 2A1*C*
, M. R., 6A12, 6B124, 6B140, 3148
l, A., 6B81
lnik, E. D., 2J54
brola, R. J., 5J119
nakova, L., 3B162
ik, A. A., 5A3*C*
ing-Beroard, J., 5F15
ulo, C. L., 2A3*C*
bal, J., 5B154
lna, R. N., 6A3*C*
lwick, T. C., 1B129
lwick, W. I., 2B86
kovskaya, S. M., 4D80
karova, P., 3E5
krabarti, C. L., 2A13, 2J89, 90, 3B112
kraborti, J., 3F24
kraborty, J., 5J104
asinska, B., 2E7
aya, Z. I., 5H43
lice, J. S., 1G12
mers, Robert A., 4E18
mers, Ronald A., 2D2
mberlain, W. J., 2D62, 2D74
mbles, A., 2A7*C*
mpigny, M., 4J38
n, C. C. Y., 4D12
n, H. S., 6D35, 6H20
n, H. T., jun., 2F30, 5F34
n, P. W., 1J107
n, S. C., 6D6
Chan, S.-H., 3E46
Chance, B., 1J32
Chandler, C. D., 1C83, 4C96
Chandler, D. W., 1J40
Chandra, S., 1B137, 1B138
Chang, C. W., 1D12
Chang, F.-C., 6H30
Chang, H.-J., 6A8
Chang, J., 6F18
Chang, J.-Y., 3D94
Chang, R. C., 3H40
Chang, S. K., 4F7
Chang, S. S., 3F47
Chang, S.-S., 1J89
Chang, T. L., 4E31
Chang, W. M., 3A12
Chantooni, M. K., jun., 6A17
Chanysheva, T. A., 6B116
Chao, C.-N., 1H3
Chao, J.-M., 2C85
Chapman, G. B., II, 2A1*C*
Chapman, L. J., 5J8
Chaprasova, L. V., 4B98
Charalambous, G., 1F15
Charandabi, M. D., 2B5
Charbonneau, C. F., 5F44
Charles, R., 6A1*C*
Charteris, A., 1D62
Chatten, L. G., 4E43
Chatterjee, K., 3B139
Chatterjee, S. S., 1B104
Chatterjie, N., 2D30
Chattopadhyay, A., 2A4*C*
Chau, A. S. Y., 2J86, 5G26, 6H26
Chau, Y. K., 6H18
Chauhan, R. K., 2C33
Chavan, M. B., 3B142
Chavin, W., 4D59
Chawla, H. M., 3C37
Chawla, R. S., 1B161
Chaytor, J. P., 1F2, 1F3
Chebotareva, V. I., 5B194
Chebot'ko, K. A., 5H38
Cheever, K. L., 2D54
Chekhlarova, I., 2B146
Chellappan, S., 5A5*C*
Chemical Institute of Canada, 2H48*B*
Chemical Society, 3C65, 4A10, 4F3, 4G16
Chemla, M., 5C20
Chen, C. T., 3B49
Chen, C.-T., 3D45
Chen, G., 5D17
Chen, P.-Y., 1D8
Chen, S. C.-H., 2D66
Cheng, C.-N., 3G12
Cheng, H. N., 3J72
Chenion, J., 5B27
Chereches, M., 5B14
Cheremisinoff, P. N., 6H27
Cherkasskii, A. A., 5C49
Cherkesov, A. I., 4B100, 5B166, 5B198
Chern, C. J., 2D151
Chernaya, N. V., 5B87
Chernoplekova, V. A., 6C38
Chernov, S. V., 6B167
Chernova, A. I., 4B34, 4B65
Chernova, Z. D., 6C77
Chervyakova, V. V., 5B12, 6J72
Chesler, S. N., 2H42, 6H51
Chesneau, F., 6B236
Cheung, W. Y., 2D158
Chevli, R., 4D53
Chhatwal, G. R., 1B159
Chiarizia, R., 6B22
Chiba, M., 3B153
Chiba, T., 6D64
Chibber, S. S., 3C37
Chidakel, B. E., 1J13
Chien, P. T., 5D105
Chikishev, Yu. G., 1J20
Chikryzova, E. G., 5C31
Childs, C. E., 1D83
Chin, W.-T., 5G36
Chiriatev, M. N., 3B69
Chirkova, G. D., 5G11
Chiu, J., 2A1*C*
Chiu, S-t, 6C81
Chizhkov, V. P., 1C31
Chlapowski, E. W., 1B131
Chludzinski, J. J., jun., 6H7
Chmiel, J., 6D37
Chmiel, Z., 6G11
Chmilenko, F. A., 1B69, 4B157
Chmutov, K. V., 6B58, 6B107
Chmutova, M. K., 1B79, 6B106
Chock, P. B., 1D88
Chong, R. W., 5B170
Chopra, D., 2J1
Chortyk, O. T., 2D62, 2D63, 2D74
Choudhary, V. R., 1J111
Choudhury, V. N., 3B78
Chow, A., 1H31, 4B27, 4B162
Chow, C. D., 6J7
Chowdary, G. S., 6B195
Chrambach, A., 1J13
Chrastil, J., 2D50, 6C45
Chrekian, G. P., 1E27, 2G18
Chretien, J., 1C18
Christ, H. A., 5A7*C*
Christensen, G., 3C88
Christensen, J. J., 2A1*C*
Christensen, J. M., 4A1*C*
Christensen, N. C., 6D40
Christian, G. D., 1A10, 2D144, 2J141, 4J50, 5D86, 5H21
Christiansen, J., 4A1*C*
Christiansen, P., 2A6*C*
Christiansen, T. F., 4A1*C*
Christie, W. H., 5A5*C*
Christner, J. E., 4D63
Christopher, R. E., 4D82
Chriswell, C. D., 3H40
Chu, C.-F., 6H30
Chu, C. W., 5J113
Chu, S.-N., 2J100
Chu, W. K., 2A1*C*
Chuah, H. H., 3G8
Chuang, F. S., 4J59
Chuang, T.-F., 4B19
Chuchulina, I. A., 6B40
Chugui, Yu. V., 2J53
Chuiko, V. T., 1B69, 4B157, 6H28
Chuishchev, V. M., 5B2
Chumakov, Yu. I., 1C48, 1C54
Chun, A. H. C., 5D23
Chupakhin, M. S., 5B54, 5B117, 5J72
Churi, R. Y., 5C48
Chuvelova, E. A., 6B107
Chwastowska, J., 4D11, 5B143
Chyi, L. L., 5A5*C*
Cialella, N., 5A3*C*
Ciccioli, P., 2A6*C*
Cignini, P. L., 3C38
Cinquantini, A., 5B133

Cioica, M., 5E38
Ciric, J., 5C38, 5C39
Cirilli, G., 5D68
Ciubotariu, D., 4C51
Civic, T. M., 1J98
Claeys, A. E., 2D37
Claiborne, R. C., 5D32
Claisse, F., 2A1*C*, 6J37
Clark, B. R., 4D70
Clark, C. C., 2E11, 5E36
Clark, E. C., 1D32
Clark, J. P., 2A7*C*
Clark, M. J., 5C52
Clark, M. L., 4D58
Clark, P. J., 2B9
Clark, R. C., 3D100
Clark, R. G., 3F1
Clark, R. J. H., 3J80*B*
Clausing, R. E., 2A1*C*
Claustriaux, J.-J., 3F41
Clay, D. T., 2J35
Clayton, T. E., 1B152
Cleaton-Jones, P. E., 3D21
Cleemann, M., 4A1*C*
Clem, R. G., 5J100
Clements, H. A., 2A4*C*
Clift, M., 3B175*B*
Clinton, R. M., 3A1*C*
Clysters, H., 3B105
Coates, P. B., 2J56
Cobb, W. D., 4B148
Cochrane, G. C., 4C19
Cochrane, W. P., 1G14, 3G29, 4G32
Cockerill, A. F., 6E30
Codding, E. G., 2A1*C*
Code, R. F., 1J54
Coenegracht, P. M. J., 3A9, 6A15
Coetzee, P. P., 6B55
Coffey, J. W., 2D98
Coffin, D. E., 2A4*C*
Cohen, D. M., 1J110
Cohen, J., 1D29
Cohen, J. M., 1H47
Cohen, N., 1A1*C*, 5D10
Cohen, Y., 3B140, 6E40
Colas, A., 3H49
Colby, B. N., 3J74
Cole, P. D., 6E16
Coleman, J. E., 5D4
Coleman, M. S., 2D161
Coleman, R. L., 4A1*C*
Collart, M., 2D58
Colleran, E., 1D85
Collet, P., 3F2
Collier, R. E., 3G15
Collina, A., 5G31
Collins, G., 1D73
Colson, E. R., 1J24
Colvin, B. M., 4G40, 4G41, 4G42
Comet, A. G. de J., 5F33
Comi, V., 3D36
Comings, D. E., 3D103
Comins, N. R., 2J34, 6A1*C*, 6J20
Comite Inter-Instituts d'Etude des Techniques Analytiques de Diagnostic Foliaire, 2D4
Commission of the European Communities, 5H46*B*
Comtat, M., 5D45
Concha, F. J. M., 6A1*C*
Concon, J. M., 2G7, 2G8, 5G4
Condron, J. A., 3A1*C*
Cone, C., 2A1*C*
Connelly, S. A., 4C22
Conner, B. J., 3D103
Connor, W. E., 3D85
Conradi, E., 6D28
Constantinescu, C., 3B66
Constantinescu, G. C., 5B55
Constantinescu, T., 6E1
Conway, W. D., 2D45
Cook, M. G., 6B212
Cook, T., 2A7*C*
Cook, W. B., 3D7
Cooke, M., 3H13, 5A1*C*
Cooke, N. H. C., 2J36
Cooks, R. G., 5J78
Coolen, R. B., 3J66, 3J67
Cooley, E. F., 1J38
Cooper, H. B. H., jun., 2C69
Cooper, I., 4D40
Cooper, J. A., 2A7*C*, 5A5*C*, 6H25
Cooper, M. J., 3D70
Cooper, T., 2A4*C*
Co-operative Group of Analysis of Humic Acid [China], 2G4
Cope, A. D., 2A7*C*
Copelowitz, I., 5B209
Copsey, P. B., 1D26
Corby, M. P., 4A22
Corfield, A. P., 6D59
Cornelis, R., 4D6, 6D5
Cornford, A. B., 2A4*C*
Corral, J. Z. del, 1B125
Corte, G. L., 1H6
Cospito, M., 4B61, 5B98
Cossu, P., 6D63
Costa, E., 4D52
Costello, J., 4D35
Costerousse, O., 3B140
Coulston, F., 5D34
Coulter Electronics Inc., 3J7*P*
Coulter Electronics Ltd., 1J103*P*, 1J104*P*, 1J109*P*
Coupek, J., 4F27, 6J22
Court, W. E., 4E17
Cova, A., 5D29
Covington, A. K., 3D12, 4J54
Cowley, J. M., 2J128
Cox, L. E., 2B67, 2J87
Crable, J. V., 1A1*C*
Craft, T. F., 2A4*C*
Craggs, A., 5J90
Cram, S. P., 6H51
Cramer, C. W., 4G41
Cramers, C. A., 2A6*C*
Cranmer, M. F., 3G35
Crathorne, B., 1F3
Craver, C. D., 6J62
Crecelius, E. A., 6F17
Creno, R. J., 5D55
Crenshaw, G. L., 4B110
Cresser, M. S., 6J53
Crisp, P. T., 4H31
Crist, H. L., 4D31
Cristalli, A., 4B155
Cristau, P., 2D125
Cristescu, C., 6B224
Crites, S. K., 4D36
Crocker, I. H., 2A4*C*
Croessmann, G., 5A3*C*
Crompton, T. R., 3C94*B*
Cronin, D. A., 3F1
Crosby, N. T., 5F61
Crouch, S. R., 1J36, 2J95
Crouse, W. E., 1A1*C*
Crouthamel, W. G., 1J82
Crowley, Charles, 5D73
Crowley, Constance, 5D17
Cruden-Loeb, D., 3D41
Csajka, M., 3B73
Csanyi, L. J., 6J3
Csikai, J., 4B47
Csillag, E., 2A4*C*
Csonka, E., 4G26
Cucullu, A. F., 1F8
Cuddeback, J. E., 1J4, 6H16, 6H22
Cukor, P., 2B124, 2C83
Cullen, D. H., 2A4*C*
Cullen, L. F., 6J5
Cullen, W. H., 6H3
Culp, H. W., 4D7
Culver, B. R., 1J47, 2A1*C*
Cumming, E. M., 2D14
Curry, K. J., 1J38
Cursaru, F., 4B130
Curtis, G. J., 2A7*C*
Curtis, M. L., 1A1*C*
Curtius, H. C., 2A3*C*, 6A1*C*
Cutaia, A. J., 4A3*C*
Cutler, R. E., 3D48
Czaban, J. D., 5J86
Czanderna, A. W., 6A23*B*
Czapkiewicz, J., 4C59
Czarnecki, J., 5A6*C*
Czembor, R., 5H39
Czerkawski, J. W., 2D13
Czerniawski, M., 5C47
Czerwenka, G., 3B28
Czuha, M., jun., 4C82, 5B15

Dabrowska, J., 4B7
Dacher, J. F., 1C81
Dadic, M., 4A3*C*, 4F31
Daemen, J. M. H., 3J34
Dagnall, R. M., 2J88
Dagneaux, P. G. L. C. K., 5D20
Dahlby, J. W., 2A7*C*, 2J2
Dahle, H. K., 4G17, 5G20
Dahlmann, B., 3D130
Dahmen, E. A. M. F., 1C7
Dahmen, F. J., 5J46
Daiev, G. T., 6B211
Daile, P., 5D96
Dakin, T. A., 3D114
Dalager, S., 6H2
Dale, J. M., 5A5*C*
Daleau, G., 2J79
Dalen, N., 4A1*C*
Dalla Fini, G., 2C6
Dall'Aglio, M., 2B27
Dalton, R. W., 4C96
Damasceno, R. N., 4B99
D'Amato, G., 1C20
Damgaard, U., 2D153
Damiani, M., 4B146
Damokos, T., 1J77, 3C47, 4A16
Dams, R., 3B171, 6H5
Danchik, R. S., 5B89
Daneels, R., 2D33
Danelia, G. I., 5G1
Danesi, P. R., 6B22
Daniel, S. H., 1A1*C*
Daniels, W. D., 4D7
Danielson, J. D. S., 2J141
Daniewski, M. M., 3J32
Danilina, V. M., 5G8
Danilova, N. A., 1B154
Danilova, O. A., 3D6

ova, V. N., 6B220
elman, W., 3J34
n, D., 6D59
e, M. F., 2C82
R. N., 3E31
hkevich, V. R., 5B119
conte, L., 5D17
J. G., 6E7
ngton, E. H., 2J124
czy, S., 4B47
gh, A., 2D110
s, R., 6B20
H. A., 5A5*C*
J., 5B205
M. S., 2J150
P. N. M., 3B167
S. N., 3B139
Gupta, V., 2E54, 3E46
lva, C. T. C. B., 1B175
ani, S. D., 3G1
r, A. G., 5J28
htrey, E. H., jun., 2J110, 5H29, 5H30
, R., 5A1*C*
ria, J. M., 1D5
x, R. C. D., 2A3*C*
, N. G., 5A6*C*
l, A., 5E24
l, F., 1B132
l, W. T., 1H49*B*
lek, J., 1G18
lovitch, Z., 1D86
lson, E. R., 4J50
lson, I. E., 4A2*C*
lson, L. M., 1D4
lson, S. M., 5J84
es, E., 4D35
es, G. M., 2C31
es, R. C., 3J57
s, A. R., 2A4*C*
s, B. E., 3C49
s, D. G., 5B81, 6J55
s, D. P., 1F16, 4A3*C*
s, G. T., 4J36
s, J. E., 5A2*C*
s, J. M., 3D30
s, J. W., 1J106
s, P. H., 2D11
s, W. F., 2B107
dova, Z. P., 6B215
tins, B. G., 3J15
on, J. P., 4A4*C*
R. A., 2D112
, B., 5J1
, J. A., 4J61*B*
gelis, T. P., 2J131
bov, V., 1D78
er, F. J., 4J45, 5J46
bland, A. R., 5G3
olle, W. E., 4B20
abander, H. F., 1F13
auw, M. C. ten, 2D89
uin, M., 1B101, 3J92
n, J. L., 3B158
mp, M. R., 6C99
nn, D. E., 5J119
nu, T. I., 3C62
ercq, H., 6J15, 6J24
eyn, R., 3F16
ntardi, N. W., 3D106
x, W., 2G3
ov, Yu. M., 4B44
ova, V. P., 2B113
tra, H., 3B105
Deeper, R., 2D60
Dees, S. B., 6A1*C*
DeFonzo, A. P., 5J59
Defrise-Gussenhoven, E., 6J15
de Galan, L., 5B38, 6J60
Degen, P. H., 4D27
De Graeve, J., 3C18, 5H11
de Groot, G., 5C8
deGruy, I. V., 1F8
Degtev, M. I., 1B70
Degtyarenko, L. I., 4C31, 5D70
Deguchi, F., 1E4
Deguchi, M., 2B35, 3B43
Deguchi, T., 1B130, 4B56
DeHaas, G. G., 5H7
Dehennin, L., 3D78, 4D49
de Heus, J. G., 6F26
de Hierro, A. G.-G. L., 4A18
de Iglesias, D. I. A., 1C64
Deinekina, R. S., 2B85
de Jalon Comet, A. G., 5F33
de Jesus, A. S. M., 2B44
Dejonckheere, W., 2G23
De Jongh, D. C., 1D15
Deki, M., 2F9, 4C63
Dekirmenjian, H., 3D30
Dekker, W. H., 5G28
de Laiseca, N. P., 3B75
Delarue, G., 5J13
Delaveau, P., 4F15
del Carmen Espinosa, M., 4E41
Delcarte, E., 6G1
Del Castilho, P., 5A3*C*
del Corral, J. Z., 1B125
De Leenheer, A. P., 2D37
Deleuil, M., 2J10
Del Fiore, G., 5B192
de Ligny, C. L., 2J147
Deliiska, A., 4B28
Deline, G. W., 2A4*C*
Dell, H.-D., 5D31
Dell'Acqua, R., 2D53
Della Fiorentina, H., 5H11
Delmore, J. E., 2A7*C*
del Rio, L. A., 1D102
DeLuca, H. F., 5D89
deLuna, F. A., 5D28
Deluzarche, A., 3F34
Delves, H. T., 5A3*C*
De Marchi, F., 6E29
de Marco, C., 1D61, 6D63
de Marco, D., 2H15
Demarin, V. T., 3B65
Demczak, M., 5C45
de Meijer, P. J. J., 4J21
Dement'eva, M. I., 6B80
de Mesquita, K. G. B., 4B105
Demianczuk, D., 6C73
Deming, S. N., 5J48, 6A1*C*
de Miranda, J. F. R., 6D39
Demkin, A. M., 5B171
Deml, M., 2J24
Demoen, P. J. A. W., 5E39
de Mucciarelli, S. I. L., 3E33
DeNardo, J. J., 4E28
den Boef, G., 1B9, 1B28, 5B17
Dencker, H., 6D50
den Harink, H. C., 4J28
den Hollander, C., 2F45
Denisova, L. A., 4B34
Denisova, L. V., 5C44
Dennison, J. L., 2D52, 5C55
Denton, M. B., 1J44, 4J30
Deogny, L., 1D84
DePooter, M., 6B26
Derks, C. M., 1D33
Dermeleva, I. V., 2B155
Dernini, S., 1D61, 6D63
de Robertis, A., 2H15
de Ruig, W. G., 2F46
Desaedeleer, G. G., 5D3
De Sagher, R. M., 2D37
Desai, M. M., 1B135, 5B179
Desbarres, J., 6A18
Desbiens, G., 5A7*C*
Descamps, B., 1C21
Deschenes, L., 5B154
Deshmukh, B. K., 3B24, 4B164
Deshmukh, G. S., 1B104, 3B78
Deshmukh, S. K., 5B200
Deshpande, K. R., 6B10
Deshpande, N. V., 2B43
Deshpande, S. M., 3E18
Deshpande, V. V., 5A6*C*
Desideri, P. G., 1C35, 2C34
de Silva, J. A. F., 2A1*C*, 5D17, 5D22
de Silva, M. E. M. S., 2B121
Desmet, B., 6H5
de Sousa, A., 5B59
de Souza, T. L. C., 5H8
Dessy, R. E., 2A7*C*, 3A1*C*
Dessypris, A. G., 5D59
DeStefano, J. J., 6J6
Desty, D. H., 2A6*C*
de Swardt, M. C., 4B145
de Torres, A. G., 5B206
DeTroy, B., 4J16
Deudon, E., 3D57
Deutsche Gesellschaft fuer Fettwissenschaft, 1C62, 3C61, 6C71
Devaure, J., 2J79
de Verdier, C.-H., 4A1*C*
de Villiers, L. S., 6D15, 6D16
Devine, J. M., 1G22
Devine, R. F., 2H38
Devoto, G., 5A3*C*
de Vries, A. J., 2J10
de Vries, J. X., 6D60
de Vries, U., 4G13
Devyatykh, G. G., 5B8
Devynck, J., 4B16, 4C33, 5J13
De Waisbaum, R. G., 5E34
Dewan, R. S., 4G33
De Wiest, F., 5H11
Dewolfs, R., 3B105
Dey, A. K., 5B20
de Zeeuw, R. A., 2D1, 3C13, 5D30
Dhamija, S., 4B122
Dharwadkar, S. R., 5A6*C*
Dhumwad, R. K., 6B105
Diab, A. M., 5E15, 5E16, 5E32, 5E35
Diamondstone, B. I., 5A6*C*
Diatschenko, V., 5J113
Diaz, F. V., 5F33
DiBlasio, R., 1D91
Di Casa, M., 5A5*C*
DiCesare, J. L., 5A2*C*
Dick, D. L., 2A1*C*
Dickson, S. J., 4D22
Di Corcia, A., 4C6, 4C62
Diehl, H., 2J143, 3A4, 5J102
Dietrich, J. A., 1J38
Diez d'Aux, R. C., 2A3*C*
Diggs, D., 1D92
Di Giacomo, A., 1C64
Dijkhuis, I. C., 6D20

Dijkstra, A., 6J24
Dijkstra, G., 2F46
Di Lorenzo, A., 5A6*C*
Dimitrov, Ch., 6J23
Dimitrova, Z. S., 4J23, 6A1*C*
Din, Y.-Y., 2J100
Dineen, R. W., 3D96
Dinelli, D., 3D1*P*
Dinner, A., 2E47
Dinsmore, S. R., 5A2*C*
Dinwiddie, D. E., 2J134
Ditschuneit, H., 2A6*C*
Divis, L., 6B240*B*
Dixit, R. M., 3B91, 6B93
Dixon, E. J., 2F34
Dixon, K., 5B142
Dmitrenko, E. N., 5D70
Dmitriev, M. T., 6H10
Dmitrieva, T. S., 6C94
Dmitrieva, V. N., 6H53
Dobbs, R. A., 1H47
Doberson, M. J., 3D123
Dobrecky, J., 1E36
Dobrochiver, I. G., 5B157
Doca, N., 2H9
Dodd, P. R., 2D99
Doerffel, K., 3C76
Doerger, J. U., 5D15
Doering, C.-E., 5C43
Doering, K., 4B171, 5A6*C*, 6B235
Doern, F. E., 2A4*C*
Doerner, K., 1D6
Dogan, S., 1B53
Dokiya, Y., 4D3
Dokladalova, J., 4E5
Dokuzovic, L., 4C80
Dolgopolova, G. M., 1B31
Dolgorev, A. V., 3B98
Dolgov, A. S., 5B156
Dollimore, D., 1J91*B*
Dolmanova, I. F., 5B183
Dolp, R., 3C85
Domingo, R. C., 6H13
Donahue, J. J., 2E25
Donaldson, E. M., 5B172
Donaldson, W. T., 5A3*C*
Donetzhuber, A., 5C50
Doniak, L., 2A2*C*
Donike, M., 1D30
Donohue, D. L., 3J75
Donohue, T. M., 2D60
Donoso N., G., 2B86
Dooley, J. E., 1C56
Doolittle, R. E., 3J11
Doran, T., 4A5*C*
Dorn, D., 2D24
Dornow, V., 3J18
Dorough, H. W., 3G45
Dorozalska, A., 4G30
Doss, M., 2D133
Dougherty, J. A., 2H32
Dougherty, T. M., 2D160
Douglas, A. G., 4A5*C*
Douglas, S. L., 2D68
Doulakas, J., 6E27
Dovgal', V. I., 1B69
Dow Chemical Co., 3D56*P*
Downs, H. D., 5J34
Downs, S. F., 3A1*C*
Dowsett, M. G., 2J113
Dowty, B. J., 1D3, 3D2
Doyle, J. E., 6A1*C*
Dozol, J. F., 5B99
Drbal, K., 4B41
Dreijer-van der Glas, S. M., 1E34
Drew, D. M., 1J70, 2J135
Drew, R. E., 6F3
Driessen, O., 5D18
Drimus, I., 2H44
Driscoll, J. N., 3A1*C*
Drobyazko, V. N., 4B54, 6B83
Drosselmeyer, E., 2A7*C*
Drost-Karbowska, K., 2E10
Drozd, J., 5J27
Drozdov, V. A., 5C26
Druilhe, A., 4C41
Drwiega, I., 1B56, 4B46
Drygas, M., 6G10
Drynkin, V. I., 6B229
Dryon, L., 6C33
D'Silva, A. P., 2A7*C*
Du, N. H., 4J15
Dua, V. K., 2C35, 4C35
Duane, W. C., 5G36
Dubchenko, Yu. G., 2B62
Dubetz, D. K., 3D34
Dubois, L., 1H6, 5A3*C*
Dubois, M., 5D26
Dubovenko, L. I., 6B194
Dubrovina, Z. N., 5B210
Dubur, G., 4G12
Duc, T. M., 6J44
Ducauze, C., 4B33
Duchateau, A. M. J. A., 2D41
Duchkova, H., 3B162
Duden, R., 2D156
Dudley, W. A., 6A3*C*
Dudova, N., 1B95
Duemecke, G., 6B119
Duenner, W., 5A6*C*
Duewer, D. L., 3C41
Duff, E. J., 4B92, 5B139, 5B140
Duffey, D., 5A5*C*, 5B43
Duffy, T. G., 6A1*C*
Dugacheva, G. M., 4C27
Duisenberg, A. J. M., 3A9
Dull, G. G., 3C13
Dulley, J. R., 2D20
Dumanovic, D., 5C38, 5C39
Dumitrescu, N., 3B130
Dumitrescu, P., 6H29
Dumitrescu, V., 3B130, 4B117
Dumont, P., 5D41
Dunaev, O. P., 2C43
Duncan, A. E. W., 5D28
Duncan, B., 2A2*C*
Duncan, J. R., 1H49*B*
Dundua, V. Yu., 3D6, 6B229
Dunham, C. E., 4F18
Dunham, L. L., 3G49
Dunn, H. W., 5A5*C*
Dunn, P. J., 2B154
Dupont, J., 1D59
Dupont, J. A., 5D33, 5F44
Dupre, A., 3J88
Dupuis, F., 6J24
Dupuy, A. E., jun., 3G23
Dupuy, H. P., 4G18
Dupzyk, I. A., 1A1*C*
Dupzyk, R. J., 1A1*C*
Durand, A., 4D29
Durand, M. H., 1C18, 3C9
Duran Sanz, M., 4B138
Durham, R. W., 2A4*C*
Durliat, H., 5D45
Durst, H. D., 4C22, 6A1*C*
Durst, R. A., 6J73*B*
Dutta, J., 6D41
Dutta, R. K., 3C46
Duyckaerts, G., 3J86
Dwivedi, J. K., 3B145
D'yachenko, L. F., 1B148
D'yakova, A. P., 6B192
Dyankova, N. D., 5C40
Dye, J. L., 3J66, 3J67, 5J3
Dyer, F. F., 2A7*C*
Dyer, R. H., 5F39
Dyszel, S. M., 2H42, 6H51
Dytkowska, O., 4E47
Dzhabarova, N. K., 3B10
Dzhagatspanyan, R. V., 4C94
Dzherayan, T. G., 5B61
Dzhoneidi, M., 2E23
Dzhurka, G. F., 1C52
Dzidic, I., 3G37, 6J66
Dziomko, V. M., 2B36
Dzizenko, A. K., 4C17
Dzubay, T. G., 2H4

Eadie, M. J., 3D34
Ealy, J. A., 2A7*C*
Eastmond, R., 1F18
Easton, A. J., 3B128
Eaton, C. A., 6F28
Eaton, H. G., 4H2
Eatough, D. J., 2A1*C*, 5A5*C*
Ebel, S., 3F37, 3J89*B*, 4E27, 5E13, 5E30, 5J23
Eberhardt, E. H., 2A7*C*
Eberl, E., 6J75
Eberle, D. O., 2G26
Ebine, H., 5F65
Ebing, W., 2G2, 2G29
Ebner, M. A., 4J24
Eby, R. K., 4J36
Eccles, H., 2J16, 5J14
Ecker, E., 5J5
Eckert, J. M., 4H31
Eckert, W. R., 3C80
Eckfeldt, E. L., 6J70, 6J71
Eckhardt, J. G., 4J30
Eckhoff, N. D., 6G2
Eckschlager, K., 3A2, 4A7
Eckstein, R. R., 3B88
Eddy, B. T., 3B99
Edgar, J. S., 2C70, 4C71
Edgar, R. M., 5B165
Edidin, M., 2D162
Ediger, R. D., 2A1*C*
Edrissi, M., 3B76
Edwards, D. G., 1G10
Edwards, G. T., 3J38, 5J29
Edwards, L. L., 6H47
Edwards, R. A., 4F14
Edwin, E. E., 4D69
Edwin, R. P., 2J96
Efremov, E. A., 6C36
Efstathiou, C. H., 1C22
Egan, R. W., 5D42
Egberg, D. C., 1F12, 3F52
Egels, W., 5A3*C*
Egertova, J., 1G18
Egerts, V., 4G12
Egge, H., 5D47
Eggstein, M., 3D82
Egikyan, R. T., 6B164
Egle, K., 1D44
Eglinton, G., 3J77
Egoreichenko, O. A., 5H43
Egorov, A. M., 6B125
Egorova, S. N., 5B41
Egoshi, H., 3B14

alt, D. H., 1H2
ann, W. D., 5A5*C*
nberger, F., 1H44, 1H46
orn, K., 4A1*C*
elberger, J. W., 2A19
holtz, P. C. N., 4D26
holz, G. G., 6A3*C*
ler, B., 3B83
r, E., 1C19
lboom, T. D., 6D39
lf, N., 2A1*C*
nburg, J., 6D68
nreich, S. J., 3H26
ntraut, K. J., 2A1*C*
nwiener, H.-G., 4D42
abouri, S. R., 5E5
azi, F., 2B6
z, M., 1B121, 3B80, 5B107, 3157, 6B228
nes, A., 4A1*C*
borg, S., 2C22
trom, G., 4G23
aser, A. A., 5D99
Badawy, El-S., 2J52
ad, H., 4B67
awy, M. A., 2E48, 5E5
Dib, M. A., 1H37
arn, L., 4A1*C*, 6A1*C*
ridge, J. S., 2A7*C*
ass, H., 6A1*C*
Gharabawy, A., 3D92
Hamalawi, A.-R. A., 3G3
orst, J. T. K., 5D20
s, L., 4J29
abe, R. L., 1E38
Kady, A. A., 5A5*C*, 5B43
in, Yu. N., 4C17
Kot, A., 3B70
ehausen, D., 5A7*C*
ott, J., 2A1*C*
s, R., 6F20
s, R. A., 4C87
s, R. H., 2A1*C*
Hasry, S., 4A2*C*
enhorst, H., 2A6*C*
Hergawy, S. A., 6C68
Herzabani, M., 5D99
ff, C., 1B2
nick, M. C., 3D60
ayed, M. A., 1E12, 2D91
zabouri, S. R., 2E48
hahat, M. F., 3B46
herbini, A., 1D77
henko, N. L., 4B10
blin, E. A., 3C82
ery, J. F., 2A7*C*
es, A. V., 6A2*C*
merich, A., 5F17
onds, A., 5D18
gonio, D. P., 2H42, 6H51
eele, R., 6A1*C*
wer, R. P., 4E35
Hahl, B. S., 4G40, 4G42
eel, G., 3D3
eel, K., 4A1*C*
eel, N. A., 1B103, 6H8
eelbrecht, F. M., 1D52
eeler, W. E., 2A7*C*
eelhardt, H., 6A1*C*
eelmann, C., 2B8
eer, S. C., 4A1*C*
eewald, W., 1C44
ller, P. P., 1F11
llish, J., 5J104
Enke, C. G., 3J67
Enomoto, S., 5B174
Eon, C., 1J8, 2J19, 3J13, 6A1*C*
Eppler, H., 5A6*C*
Eppley, R. M., 4G1
Epstein, M. S., 2A1*C*
Epstein, S. S., 5H35
Epton, R., 3J22
Erbelding, W. F., 6J8
Erdtmann, G., 1B176, 5B128
Eremenko, S. N., 5B150, 5B199
Erikson, N. E., 2A1*C*
Ermolaeva, T. G., 2B38
Erney, D. R., 5G19
Ernst, G. F., 2G28, 2F10, 4G37
Ernst, H. J., 5D83
Ernst, K., 5B105
Ershova, N. G., 1C40
Ershova, N. S., 5B204
Ersser, R. S., 5J16
Ertan, G., 5D39
Escott, B. M., 2A5*C*
Eshmukhambetova, M. S., 1B18
Eshwar, M. C., 3B103, 3B125
Eskes, A., 6J24
Esmann, V., 5D38
Espi, N., 6B198
Espinola, A., 4B87
Espinosa, M. del C., 4E41
Essien, C. D., 5E8
Estel, D., 5C43
Esterbauer, H., 5D57, 6D49
Estes, R. L., 2A4*C*
Etchison, J. R., 1D40
Etingova, E. M., 6B146
Etten, N., 3B122
Ettinger, K. V., 3B26
Ettre, L. S., 2J42, 3J42, 5J34, 6A1*C*
Etz, E. S., 4J55
Etzold, G., 2E12
Euler, D. E., 1A9
Eusebius, L. C. T., 5B20
Evans, C. A., jun., 2A1*C*, 3J50, 3J51, 3J74
Evans, D., 5D4
Evans, D. H., 1J56
Evans, D. J., 3D53
Evans, F. J., 1D48
Evans, James E., 1D51
Evans, Joseph E., 2A21
Evans, J. R., 3D25
Evans, K. P., 1H18
Evans, M. B., 4A5*C*
Evans, W. C., 6A3*C*
Evans, W. G., 6E12
Eveleigh, J. W., 1J5
Evendijk, J. E., 5A3*C*
Everaerts, F. M., 6A2*C*
Everdij, J. J., 2J115
Everse, J., 5A2*C*
Evseeva, N. K., 2B36
Eyem, J., 2A6*C*
Eysenbach, W., 6B159

Fabregas, J. L., 1E45
Fadeeva, L. A., 6B59
Fadrus, H., 2H33, 2H41, 3H33
Faerman, V. I., 3C35
Fagerson, I. S., 3A10
Fahy, B. A., 5J2
Faithfull, N. T., 5G16, 6B193
Falco, J. W., 5H23
Fales, H. M., 2A1*C*
Falk, H., 3B137
Falkay, G., 2E51
Fallick, G. J., 6A1*C*
Falter, H., 2D112
Fanali, S., 6B185
Fanelli, R., 4E45
Fano, V., 2B137, 6B126, 6B206
Fanter, D. L., 2A1*C*
Farag, A. B., 4A17
Farag, A. N., 3D92
Faraji-Haremi, R., 4F14
Farey, M. G., 6C97
Farhan, F. M., 6J47
Farnell, P. J., 4F16
Farrell, G., 6J64
Farroha, S. M., 1E21
Farwell, S. O., 1H20, 3H2
Fasching, J. L., 6B12, 6J1
Fassel, V. A., 1B144, 2A1*C*, 2A7*C*
Fast, D. M., 5A2*C*
Faugere, J. G., 2D10, 3G20
Faure, J., 3G20
Favretto, L., 1C63, 4C57
Favretto Gabrielli, L., 4C57
Fawzi, A. B., 3B38
Faye, G. H., 3B169
Fecko, J., 5E45
Fedin, T., 6C65
Fedina, S., 6B99
Fedoroff, M., 3B127, 5B169
Fedorov, P. I., 3B115
Fedorov, V. A., 4C14, 6C36
Fedorov, V. V., 5B134
Fedorova, G. K., 6B220
Fedorova, T. I., 2B38
Fedyachkin, M. M., 4C4
Fedyanin, A. A., 2C15, 4C12
Feher, I., 1J6
Feher, K. G., 3D83
Feher, T., 3D83
Fehl, A. J., 2J101
Fehringer, N. V., 4F24, 5G18
Feibush, B., 6A1*C*
Feinstein, W., 1D31
Feldstein, J., 1A1*C*
Felgenhauer, K., 6A2*C*
Felkel, H. L., jun., 3B34
Felker, P., 2D104
Fell, V., 2D64
Fels, J. P., 4D49
Fenimore, D. C., 6A1*C*
Fenkart, K., 1C5
Fentiman, A. F., jun., 4D21
Fenyo, J.-C., 2B148
Ferguson, B., 4A3*C*
Ferguson, R. J., 3J47
Ferguson, W. E., 2A5*C*
Fernandez, J. M. L., 4B166
Fernandez-Gutierrez, A., 6B124
Ferrara, L., 5F40
Feshchenko, N. G., 6B220
Feyerabend, C., 3D32
Ficke, H. G., 4J28
Fiddler, R. N., 4F17
Fidel'man, B. M., 5B28
Fieber, W., 5C57
Fiedler, J., 5D31
Fiedler, R., 3D16
Field, F. H., 1E48, 6J65
Fielek, S., 2A4*C*
Fifield, F. W., 6A21*B*
Figel'son, Yu. A., 3B124, 6B168
Figert, D. M., 5F39

Figge, K., 1F1, 2C80, 2C81
Filan, J., 2E19
Filatova, N. N., 4C40
Filatova, T. A., 2B156, 5B214, 6B225
Filatova, Z. I., 1C60
Filby, R. H., 3B170
Filby, W. G., 6C31
Filer, T. D., 2A7*C*
Filimonov, B. F., 3H44
Filimonova, M. M., 3H44
Filippov, E. P., 6C36
Fincher, C. L., 1H10
Fincke, A., 3F51
Fine, D. H., 2F12, 2F13, 2F14, 4F6, 5H35
Fink, U., 4J47
Finley, J. W., 3F7, 4D79
Finn, C., 1D29
Finn, W. D., 5A2*C*
Finocchiaro, V., 1J83
Fischer, A., 3E48, 4E37, 5E41
Fischer, H., 2G35, 4G36
Fischer, J. E., 1J48
Fischer, W. G., 2J27
Fisel, S., 6B72, 6B81
Fish, F., 3D43
Fishbein, L., 3G48, 3G52*B*
Fisher, H. B., 3C42
Fisher, J. F., 5F35
Fishkova, N. L., 5B57
Fitak, B., 3G40
Fitch, C. D., 4D53
Fitchett, A. W., 5H29, 5H30
Fitzgerald, J. J., 4J57
Fitzgerald, J. M., 1E3, 5D64
Fitzky, H. G., 5D80
Fitzpatrick, T. J., 1G3
Flamm, B. L., 5E37
Flamm, D. L., 2H11
Flanagan, F. J., 2B159
Flanderkova, B., 6F4
Flanigan, D., 1H4
Flaschka, H., 1B1
Flath, H. J., 2C72
Flavell, R. G., 4J35
Flayeux, R., 3F32, 5F48, 5F49
Fleet, B., 2C79
Fleisher, J. H., 3D86
Fleming, R., 2F29
Flesher, J. W., 3C36
Fletcher, W. H., 5J38
Floarea, M., 2H44
Flower, R. J., 5D43
Floyd, M., 3H38, 5G6
Flueckiger, R., 2A6*C*
Flyantikova, G. V., 5B121, 6B122, 6B123
Flynn, G. W., 1J30
Focher, B., 3C75
Fock, H., 1D44
Fodor, G., 3E45
Fodor, M., 5A6*C*
Fogg, A. G., 1B156, 1C68, 3B111
Foliforova, I. G., 1C75
Folkmann, F., 1J33
Foll, J.-P., 1C17
Folsom, T. R., 4D8
Folster, P., 6F26
Foltz, R. L., 4D21
Fomin, G. S., 4B135
Forchheimer, A., 6A2*C*
Ford, J. H., 3G28
Ford, L. A., 4E3
Ford, W. T., 2J139
Fore, S. P., 4G18
Forehand, T. J., 3G23
Foreman, J. K., 5F11
Forman, L., 5F29
Forney, R. D., jun., 4D21
Forrey, A. W., 3D48
Forsberg, G. A., 3B107, 6B74
Forst, W., 1C21
Forster, A., 4F29
Foss, O. P., 4A1*C*
Foster, E., 5J81
Foster, L. L., 1D25
Foster, W. W., 1B152, 4B148
Fouad, M. N., 4C53
Foulds, S. M., 3G15
Fountaine, J. E., 2A1*C*
Fouzder, N. B., 2C79
Fox, M. E., 2A4*C*
Frahm, B., 3D31
Frahm, L. J., 2F40, 4G15
Frainnet, E., 4E9
Frairia, R., 6D52
Frampton, V. L., 2G9
Franc, B., 5B135
Franc, J., 2C10
Franck, H. P., 3E13
Frank, J., 2J126
Frank, Rainer, 6D60
Frank, Richard, 2G22
Frank, W., 4F20
Frankfater, A., 4D77
Franklin, J. C., 2A7*C*
Frankovskii, V. A., 4B154
Franquelo, L. M., 5B60, 6B214
Frantsishko, F. S., 1B49
Franzen, K.-H., 4F36
Franzke, C., 2G12, 2G13
Fraser, R. S., 2J85, 6H40
Frazer, J. W., 1J69, 6B145, 6B147
Frech, W., 2B144, 3B154
Fredericks, G. E., 1J3
Fredriksson, S., 1D75, 2J23
Freeark, W., 2A1*C*
Freeh, E. J., 3A1*C*
Freeman, G. G., 5F36
Freeman, R. K., 2A3*C*
Frehse, H., 4G27
Frei, R. W., 1E30, 2B14, 3G32, 4E32, 6H56*B*
Freiser, H., 1H7
French, W. N., 4E33
Frenkel, M. J., 4D61
Frenzel, F., 4B11
Freund, S. M., 1H16
Freyer, H. D., 6J4
Friberg, T. S., 5H42
Fric, F., 1J83, 3D104
Fricke, F. L., 6B7
Fricker, A., 2D156
Friede, G., 2J130*B*
Friedel, R. A., 2A7*C*
Friedhoff, P., 2B142
Friedman, D., 2D51
Friedman, M. H., 1J86, 6A3*C*
Friedrich, H., 5F19
Friedrich, K., 1J19
Friese, P., 1C10
Frigerio, A., 4D25, 4E45, 6A1*C*
Frimmel, F., 1H42
Frindik, O., 3D15
Frischkorn, C. G. B., 3F26
Frischkorn, H. E., 3F26
Frishkorn, G. W., 1A1*C*
Fritz, J. S., 3H40, 6B17
Froberg, J. E., 4G28
Froelich, J. C., 2D71
Froeyshov, D., 4A1*C*
Frost, C. E., 4H40
Frost, J. K., 6A3*C*
Frumina, N. S., 5B150, 5B199, 5H31
Fry, J. C., 3B133
Frycka, J., 4C43
Fuchs, C., 2D24
Fuchs, C. A., 2D24
Fuchs, C. H., 2H19
Fujie, T., 2E41
Fujii, K., 1B116
Fujii, S., 5D104
Fujimura, K., 6C27
Fujimura, Y., 3E11, 4E26
Fujino, O., 1H35
Fujita, K., 1J11
Fujiwara, K., 3B33
Fukamachi, K., 5J95
Fukaya, K., 2F3
Fukuda, J., 2D38
Fukui, S., 2F3, 2F4, 2H10, 2H30
Fukushi, N., 3B60
Fukuzawa, K., 1D46
Fuller, C. W., 6B234
Fuller, W. F., 3A1*C*
Funaoka, N., 1E4
Fung, H.-L., 2E34
Fung, K. K. H., 3G46
Fung, K. W., 2B111
Fung, T., 3G10, 3H34
Funt, J., 5A6*C*
Furner, R. L., 3J26
Furukawa, H., 2D100
Furukawa, M., 4B153
Furusawa, M., 3C39
Furuta, N., 6J58
Furuya, K., 4B96
Fustoss, L., 5A6*C*
Futa, K., 4C55
Futekov, L., 3B123
Fuwa, K., 1J46, 3B33, 4D3, 6B76, 6J58

Gaal, F. F., 6B184
Gabbay, S. M., 5C53
Gabis, V., 2J77
Gabov, N. I., 5C22
Gabrielle, L., 2D125
Gabrielli, L. F., 4C57
Gabrovski, I., 2B146
Gacesa, T., 5A6*C*
Gachon, M., 6C6
Gade, K.-H., 2E3
Gad-El-Rub, L. N., 1E37
Gado, P., 5A6*C*
Gaede, G., 1D69
Gaenshirt, K. H., 2D44
Gaeta, R., 6B95
Gagliardi, E., 4B4
Gagne, D., 5E17
Gaibakyan, D. S., 4B18, 6B164
Gaidano, G. P., 6D52
Gaiduk, A. P., 6B233
Gaillard, J.-C., 1G15
Gaillochet, P., 6B98
Gajewska, M., 1E18
Gal, J., 5E37
Gal, S., 5A6*C*
Galan, P., 3C55

hin, G. M., 4B51
hina, S. M., 6C90
nte, E., 6A2*C*
eanu, I., 3E45
acs, M. Z., 6J3
yan, N. G., 2B39
, V., 6C60
skaya, V. I., 5H38
n, M. A., 5B134
G., 4C18
gher, W. J., 3D109
i, Z. A., 6B180
, O. K., 6H38
gos, E. J., 2C57
, G., 2D72
rini, M., 5A5*C*
s-Olender, J., 5B135
erin, G. M., 1C43
ern, G. D., 2C55
ern, G. M., 4C40
shko, S. V., 5B167
id-Zade, G. A., 5B185
go, L. I., 6B182
hev, N., 6B186
likota, M., 4A13, 5B144
scu, I., 5E38
eva, E. M., 5B185
kina, E. S., 1C73
ois, E., 2G11
ois, M., 3B19
raev, V. P., 6B11
lin, G., 2F42, 3F27
j, J., 6A1*C*
nin, V. F., 3B131
er, H. R., 3C49
uzov, V. G., 2C1
a, F. C., 5B60
a, M., 5D67
a de Jalon Comet, A., 5F33
a de Torres, A., 5B206
a-Granados Lopez de Hierro, 4A18
a Sanchez, A., 2B76
iner, J., 1H29, 3H17, 3H37
ner, R. J., 1F18
ner, R. P., 2J63, 5A5*C*, 6J42
, B. S., 1B158
, P. D., 5A6*C*
er, G. B., 5G3
ys, V. P., 5D2
ott, J. C., 5D16
son, A. W., 5H35
oway, A. N., 5J68
o Sanchez, L., 2C17, 4C11
ell, S. J., 3J77
aric, J., 6C44
ng, R., 4H3
T., 5A6*C*
z, J. M., 3J86
ov, Yu. F., 6C49
eau, M., 3B172
J. N., 1B120, 3B126
er, J.-A., 6C100*B*
, S. A., 5B92
chev, V. S., 1C53
llov, F. F., 3B9
llov, V. V., 4B132
llova, L. P., 5B148
rgious, Y. A., 4B84, 6C68
lk, J., 5C45
ych, Z., 2E2
B. W., jun., 2A1*C*
vv, G. A., 3D50
n, J. S., 5F20

Gedcke, D. A., 2A1*C*
Geddes, I. C., 5D26
Geer, R. D., 1H20
Gehenot, A., 6C6
Geher, K., 3D73
Gehra, H., 1F10
Gehrke, C. W., 3G2, 4G4, 4G5, 5G13
Gehrke, R. J., 3J57
Geiger, U. P., 4D27, 6D24
Geike, F., 3D120
Geiss, R. H., 4J39
Geissbuehler, F., 2D95
Geissler, M., 4F12
Geizler, Yu. S., 1B145
Gelbke, H. P., 4D50
Gellerman, J. L., 5D50
Gelsema, W. J., 2J147
Generalova, V. A., 4H35
Genest, J., 6D51
Genet, M., 5J110
Genkina, G. L., 3G27
Genova, N., 5A5*C*
Genshaw, M. A., 2A1*C*
Gentilcore, K. M., 4F17
Geoffrion, R. R., 2A7*C*, 2J2
Geoffroy, A., 5A6*C*
George, A. E., 2A4*C*
George, D. A., 2G38
George, G. M., 2F40
Georgiadis, A. G., 2D98
Georgieva, I., 2E20
Gerasimenko, G. I., 6B89
Gerasimov, V. A., 5A6*C*
Gerber, J., 5B9
Gerber, J. N., 2A1*C*
Gercken, G., 3C21
Gergei, L., 4B47
Gerhardt, W., 2D153, 2D154, 4A1*C*
Germs, A. C., 6F14
Gerritsma, K. W., 6C53
Gershman, S. D., 3C81
Gerstl, R., 3G16, 6G5
Gervais, C., 3D93
Gerval, P., 4E9
Gervasi, G. B., 3D36
Gesser, H. D., 4B27
Gether, J., 5G17
Gethner, J. S., 1J30
Getz, M. E., 5G25
Getzendaner, M. E., 2F7
Ghandour, M. A., 1B23
Gharbo, S. A., 2E21, 4D68
Ghersini, G., 3J48*B*
Ghilardelli, G., 3E42
Ghose, A. K., 5B20
Ghosh, T. K., 6B52
Ghoul, D. C., 2E43
Ghourab, M. G., 4E15
Giacin, J. R., 2F11
Giam, C. S., 6D35, 6H20
Gianazza, E., 2J21, 2J22
Giannetti, E., 6C8
Giatt, Y., 1D67
Giauque, R. D., 5A5*C*
Giavarini, C., 3G14
Gibson, K., 1D96
Gibson, N. A., 4H31
Gibson, R. H., 5B76
Giebelhausen, A., 6C92
Gieres, G., 4J43
Gifford, L. A., 3E37
Gigevich, V. S., 6B233
Gijbels, R., 5B52, 6B36

Gil-Av, E., 6A1*C*
Gilbert, B., 1J42
Gil'bert, E. N., 6B42
Gilbert, S. G., 2F11
Gilbey, J., 2A2*C*
Gilby, A. C., 5J62
Giles, I. S., 5A5*C*
Gillen, M. F., 2J122
Gillespie, R. E., 2A1*C*
Gillham, B., 5D73
Gillieson, A. H., 4B168
Gillin, J. C., 4D52
Gilmour, W., 3A1*C*
Gilpin, R. K., 3J12
Gimenez Plaza, J., 6B28
Gindin, L. M., 4B159, 4B160
Ginther, B. E., 4G8
Giovanniello, T. J., 2E28
Girard, M. L., 5C20
Girardi, F., 2D7
Giron, D., 5A6*C*
Gissel, C., 6F15
Gisslow, M. T., 4D78
Githens, S., 3D2
Gitis, E. B., 6B61
Gitis, S. S., 1C32, 1C39, 4C40
Gladney, E. S., 2B157, 3D22, 6B231
Glaeser, E., 4H41
Glaeser, R. M., 2J123
Glaeser, W., 1B21
Glaser, L., 1D103
Glasl, H., 6E21
Glastris, E. G., 5H6
Gleason, D. D., 4J8
Glebko, L. I., 6B144
Glembotskii, A. V., 2B3
Glick, D., 2J71, 5A2*C*
Glinska, M., 3B136
Glover, J. H., 2A9
Glushchenko, E. L., 6B71
Glushchenko, L. M., 3B93
Gluskoter, H. J., 6A3*C*
Gluzinska, M., 5C29
Glynne-Jones, E., 6D69
Gnatishin, O. M., 5B127
Gnauck, R., 6C87
Goates, S. R., 3H10
Goby, G., 5J110
Godden, R. G., 3B58
Godovikov, A. A., 6B42
Goebel, R., 2G13
Goebelsmann, U., 2A3*C*
Goeckeritz, D., 1E43
Goedde, H. W., 3D128
Goedemans, W. T., 5D91
Goedl, L., 3H31
Goeke, G., 4F26
Goell, G., 6J76
Goelz, J. F., 2J131
Goerz, H., 3B121
Goetz, D., 5B80
Goggin, L. K., 3D40
Goheen, M. W., 2A7*C*
Going, J., 2B95
Gokhberg, Zh. L., 1C59
Golberg, L., 5D34
Gold, A., 1H21
Gold, C. M., 2J67
Gold, S., 1A1*C*
Goldberg, D. M., 4D72
Goldberg, E. M., 2D61
Goldberg, M. C., 2A1*C*
Goldberg, R. N., 2A1*C*

Goldberg, V. D., 5D19
Golden, B. M., 6H6
Goldstein, D. H., 5D10
Goldstein, J. I., 1J66*B*
Goldstein, W. E., 2A1*C*
Golembeski, T. J., 1B112
Golentovskaya, I. P., 1B72, 2B64
Golightly, D. W., 1B174
Golikova, N. I., 6B24
Gollandskikh, N. I., 2C55
Golovei, M. I., 5B159
Golovina, A. P., 2B18, 2B118
Golovina, Z. M., 1B20, 5H33
Golovinski, E. V., 2E45
Golovnya, R. V., 2C1
Golubev, G. S., 1C32, 1C39
Golubev, V. N., 2B156, 5B214, 6B225
Gomaa, C., 4E14
Gomez, A. B., 4C86
Gomez, E. L., 1B125
Gomez, M. S. G., 5F33
Gomez-Capilla, J. A., 3D76
Gomm, P. J., 4E7
Goncharenko, V. P., 5B216
Goncharov, G. P., 5B63
Gondermann, H., 4C29
Gonzalez, B. G., 1E36
Gonzalez, F. M., 1D3
Gonzalez, J. A., 6B95
Gonzalez, L., 6B95
Goodbread, J. P., 2C54
Goode, G. C., 1J87
Goodhead, K., 5F11, 5F12
Goodrich, J. E., 1D53, 2D82
Gopal, M., 5E42
Gopal, R., 5G10
Gorbachev, V. P., 5G8
Gorbanev, A. I., 4B135
Gorbatkova, V. Kh., 2B94
Gorbunova, V. E., 3H44
Gorczynska, K., 5C29
Gordadze, G. N., 2C55
Gordienko, V. I., 3J81
Gordon, G. E., 3B170
Gordon, G. R., 2E43
Gordon, H., 2C63, 2H47
Gordon, I., 1D78
Gordon, J., 2D117
Gordon, J. W., 5D63
Gordon, M., 3G1
Gordon, W. A., 2A1*C*
Gorenc, B., 2H36
Gorenko, A. F., 2B89
Goretti, G. C., 2A6*C*, 2H45
Gorina, D. O., 2B123
Gorlova, M. N., 5B164
Gorniak, H., 2B150
Gornostaeva, T. D., 6B43
Gorog, S., 4E42
Gorokhovskaya, V. I., 4D67
Gorshenina, A. P., 5B77
Gorshkov, A. I., 3B84
Gorshkova, N. I., 4B97
Gorski, J., 6J75
Gortatowski, M. J., 2J85
Goryanskaya, G. P., 1B64
Goshima, F., 3B16
Gosink, T. A., 2H1
Gosselin, L., 3C18
Gosser, L. A., 2E21, 4D68
Goto, M., 6D53
Goto, Takashi, 3B109
Goto, Takeshi, 3B151
Gottschalk, G., 2A8, 4A8
Gottschall, W. C., 5B182
Gough, T. A., 2F15, 5F12
Gould, C. J., 4G26
Gould, D. Z., 6B207
Gould, E., 3D105
Gould, R. W., 5J43
Goulden, P. D., 5H26, 6H18, 6H37, 6H42
Gouterman, M., 4J50
Goutte, R., 3J78
Gouw, T. H., 5A1*C*
Govaerts, A., 5B52, 6B36
Goverdovskii, Yu. V., 4C94
Gowda, B. T., 6A9
Gowda, H. S., 1B171, 4A14
Gowda, N. M. M., 4D57
Gower, D. B., 3D80
Graab, J. W., 2B107
Grabiec, S., 2B7
Grabke, H. J., 6B199
Grabowska, I., 2E31, 5E10
Gracia Gomez, M. S., 5F33
Gracza (nee Lukacs), M., 1E7
Gradev, G. D., 6B211
Gradskova, N. A., 6C91
Graham, J. H., 4E25
Graham, N., 1J32
Graham, R. E., 1E40
Graichen, K., 6J76
Gramenzi, F., 5D101
Granda, M., 1B38, 2D22
Grandmaison, M., 2A4*C*
Graneli, A., 1J72
Granovskii, Yu. V., 2B118
Grant, G. C., 3F3
Grant, H. L., 4A3*C*
Grasbeck, R., 4A1*C*
Grasselli, J. G., 2A1*C*, 6J62
Grasserbauer, M., 2J66, 4H1
Grassi, R. L., 3B40
Grassini Strazza, G., 4B155
Grassme, W., 1J37
Graubaum, H.-J., 2D150
Grava, J., 1G7
Gravier, M., 5C51
Gray, A. P., 5A6*C*
Gray, B. C., 2D83
Gray, D. O., 3D96
Gray, G. A., 1J57
Gray, L. W., 2A7*C*
Gray, M. J., 4D62
Gray, N. A. B., 3J77
Gray, P. B., 4D72
Grayson, M. A., 2A1*C*
Grba, V., 3B174
Grdinic, V., 5J18
Greaser, M. L., 5F26
Green, H. C., 4B114
Green, M. S., 4G11
Greenberg, E., 1B90, 5B37
Greenfield, S., 2J70, 3B175*B*
Greenhalgh, R., 1G14, 2G33
Greenhow, E. J., 3E41, 4C25
Greenland, L. P., 1G8
Greenwood, N. D., 3E28
Greer, S., 3D123
Gregersen, N., 4A1*C*
Gregory, T. A., 3G20
Greifner, M. I., 1D88
Greig, R. A., 3D10
Greiner, A. C., 6D6
Greinke, R. A., 4H16, 5A1*C*, 6H21
Grenier, P., 3C31
Grenier-Loustalot, M.-F., 3C31
Greve, P. A., 5C8
Grieco, C., 5E22
Grieg, A., 4A1*C*
Griepink, B. F. A., 2G28, 4B35, 4J4
Grieser, R. H., 3C86
Grieshaber, M., 1D69
Griffin, W. J., 6E7
Griffith, I. P., 2D120
Griffiths, B. W., 2J73
Griffiths, J. M., 4B158
Griffiths, K., 4D47
Griffiths, P. R., 2A1*C*
Grigg, J. L., 1G6
Grigor'ev, B. S., 6B173
Grigorovich, S. L., 4C14
Grigoryan, L. A., 4B136
Grigsby, J. H., 4A3*C*
Grilli, E., 5J54
Grimaldi, J. J., jun., 5J65
Grime, J. K., 2A1*C*
Grimmer, G., 2F16
Grimova, J., 6D30
Grinzaid, E. L., 5B212
Grob, K., 2A6*C*
Grob, R. L., 2A1*C*
Groberman, L., 1J41
Groce, F., 3C38
Groenen, P. J., 2D89
Groeneveld, K. O., 2J75
Groening, R., 5E40
Groenneberg, T. O., 3J77
Groffman, D. M., 2F34
Grolimund, K., 1J19
Gromova, A. D., 2B155
Gromova, T. I., 1B37
Gros, R., 5A3*C*
Grosch, W., 1F9
Groschinsky, M., 6D32
Grosjean, D., 1H15
Gross, A. F., 2F49
Gross, D., 5C28
Gross, H., 3H31, 6B100
Gross, H. G., 2A4*C*
Grosse, Yu. I., 5B45
Grotch, S. L., 2J117
Groth, R. H., 5H6
Groth, T. L., 4A1*C*
Groves, M. J., 1J99
Gruber, E., 5J118
Gruber, V. F., 3D47, 6A1*C*, 6D57
Gruen, L. C., 5J4
Gruenert, A., 3D67
Gruenfeld, M., 2A4*C*
Grundmann, I., 5J117
Grunin, A. V., 4B43
Grushka, E., 2A1*C*, 4C22, 6A1*C*
Gruss, R., 3F29
Grys, S., 3D115
Grzegrzolka, E., 5B143
Grzybowski, J., 2C25
Gschneider, K. A., jun., 2B163*B*
Gubinskii, B. V., 2J144
Gucwa, A. J., 4C72
Gudkova, G. A., 1C33
Gueggi, M., 5J91
Guenier, J. P., 1C81
Guenthard, H. H., 2J108
Guenther, K., 6C31
Guest, R. J., 4B69
Guha, O. K., 6A1*C*
Guichard, C., 6B103

ault, G. G., 1D96, 1J74, 149, 2J136, 3J84, 4A1*C*, 106
aud, C., 3J78
aumont, R., 5J110
emin, C. L., 2J10
nette, R. A., 1A1*C*
chard, C., 5C27
n, V. P., 2A10, 5A5*C*
chon, G., 1J8, 2J19, 3C78, 13, 4H13, 5D40, 6A1*C*
um, A., 6B54
elli, S., 3D1*P*
erov, M. F., 3B84
p, B. H., 2H42, 6H51
inov, T. M., 5F9
ri, T., 1E6
ie, L.-M., 4D24
erson, G. C., 2A4*C*
ink, R., 6A3*C*
y, I. W., 3E28
a, B. K., 1B120, 3B126
a, D., 5E27
a, G. P., 6B138
a, P. C., 1A7
a, S. L., 1B8
a, S. P., 1B25, 5B40, 5B201
a, V. K., 1B13
a, Y. K., 4B91, 5E27
nowski, A., 5D103
anov, A. N., 4B58, 6B87
nkel, E., 1G16
ey, T. W., 2B96
ey, M. E., 4H23
vich, V. V., 4H38
kova, N. N., 5B150
inov, I. K., 4B104
inov, V. K., 5B161
v, S. I., 3B50, 3B68, 4B59
now, M. A., 5J35
afsson, J. E. C., 4A1*C*
afsson, S. E., 1J62
, O. M., 5B163
ier, G., 4J15
necht, W. F., 3J54, 6C32
nacher, R. G., 5B105
che, B., 5B173
er, D. E., 1J44
n, K. C., 1E6, 5D39
r, M. F., 3H13, 5A1*C*
r, R. L., 1D80, 1D81
i, M., 5J54
zda, J., 3G40
nhaal, O., 2C30

rekke, O., 4A1*C*
, A., 5A3*C*
e, J., 5A3*C*
eb, A. A., 1E15, 2E17
b, R. M., 6C68
g, F.-J., 4B64
ey, D. L., 5A2*C*
man, M. R., 6C10, 6D25
ioannou, T. P., 1C22
rn, H., 2F33, 5F16, 6F21
ija, O., 2C11, 6C5
istelios, I., 3J35
erer, A. F., 2D63
elfinger, P., 4D20
ni, K., 2H23
li, W., 1B53
ng, M., 4G38
sler, H., 3J17, 5J15

Hafeez, M. A. M. A., 1D77
Hafez, F., 1B76, 6B97
Hafkamp, W., 3H25
Hagan, J. E., 2A4*C*
Hagberg, E. C., 5F26
Hageman, L., 2A1*C*, 4G8
Hagemark, K. I., 2B48
Hagen, W., 5F52
Hagerman, D. D., 1D56
Haggag, A., 3B70
Hagger, D., 3J55*P*
Hailer, G., 2F6
Hainberger, L., 4B24, 4B99
Hajko, V., jun., 6B203
Haken, J. K., 3C19, 4J22, 6A1*C*
Hala, S., 4C8
Halang, W., 2A6*C*
Halasz, I., 6A1*C*
Haldar, B. C., 3B141
Hale, F. H., 5J81
Hall, D., 4A2*C*
Hall, R. C., 4C28, 6D19
Hall, T. D., 2J48
Hall, T. M., 2J65
Halle, R., 5A6*C*
Halmos, Z., 5A5*C*
Halpaap, H., 6A1*C*
Halpern, R. M., 4D70
Hamada, G. H., 1A1*C*
Hamelle, G., 3D66
Hamilton, C. H., 5F13
Hamilton, C. M., 2E25
Hamilton, D. C., 4J33
Hamilton, E. I., 4A4*C*
Hamilton, H. E., 2D36, 3D40, 6D17
Hamilton, I. C., 1J70
Hamilton, J. G., 2D98
Hamilton, J. H., 2A7*C*
Hamilton, R. J., 1D35, 5F67
Hamm, R., 5D75, 5F28
Hammam, A. M., 1B23, 4B85
Hammer, D., 1A12
Hammond, E. G., 6F18
Hampson, F., 6A2*C*
Hampton, J. W., 1D84
Hana, G. W., 6E26
Hanai, L. W., 2B136
Hanai, T., 4D41
Hancock, S., 1H19
Handa, A. C., 6B68
Handl, W., 4E6
Hanekom, M. D., 1B2
Hanel, G., 5E28
Haney, W. G., jun., 3C68
Hanin, I., 1D63
Hankins, D. A., 6A3*C*
Hankova, A., 2G27
Hanks, A. R., 4G40, 4G41, 4G42
Hanley, H. O., 3C25
Hann, R. A., 6D69
Hannah, D. J., 3C3
Hanneman, W. W., 3H14
Hansen, A. C., 4A1*C*
Hansen, E. H., 3J6, 4A1*C*, 5D106, 5H25, 5J89
Hansen, J., 4D34
Hansen, L. D., 2A1*C*, 5A5*C*
Hansen, N., 4D8
Hanson, H., 1D99
Hanson, R. L., 6J18
Hanst, P. L., 2A1*C*
Hantai, J., 1E29
Hanusova, J., 3H21

Hanya, T., 3H39
Haque, I., 1B30
Hara, A., 3E38
Hara, D., 5J33
Hara, M., 1B80
Hara, S., 6E35
Harada, K., 4B134
Harada, M., 2B35
Haraguchi, H., 1J46, 3B33, 6B76, 6J58
Haraguchi, K., 3B53
Harb, N., 1D77
Hardwick, W. A., 1F15, 1F16
Hardy, W. R., 5J85
Hargreaves, T., 2D132
Harigopal, V. P., 2C66
Hariharan, T. R., 1B133
Haring, B. J. A., 2H22
Haring, R., 3E25
Harke, H.-P., 3D31
Harley, J. H., 2A7*C*
Harman, J. N., III, 3A1*C*
Harney, R. C., 2J78
Harper, M. E., 4D47
Harrar, J. E., 5B105
Harrington, G. W., 4F7
Harris, D. C., 3D103
Harris, J. L., 1B174
Harris, L. E., 2A19
Harrison, I. T., 2J33
Harrison, R. M., 4H14
Harrison, S. H., 3H16, 6A3*C*
Harrison, T. S., 1B152, 4B148
Harrison, W. W., 1J60, 2J110, 3J75
Hart, L. P., 2A1*C*
Hartley, A. W., 1G11
Hartley, F. R., 5J55
Hartman, L., 3F42
Hartmann, L., 5E2
Hartmann, V., 6E8
Hartvig, P., 2C30, 4D23, 4E6
Hartwick, R. A., 6A1*C*
Haruki, T., 5A6*C*
Harvey, D. J., 2E15, 3E17
Harvey, T. M., 5J76, 6C11, 6C15
Harwit, M., 5J64
Harzdorf, C., 4C5
Hascher, U., 3B134
Hasebe, K., 1B47
Hasegawa, M., 2D31
Hasegawa, S., 2J7
Hashitani, H., 1B109, 3B85
Hashizume, G., 1H26
Haspel-Horvatovic, E., 3D104
Hass, G., 5J37
Hassan, S. S. M., 1D98, 1E24, 3C5, 3D95, 5C30, 6C9
Hastings Vogt, C. R., 6J17
Haszczyc, B., 4C79
Hatano, R., 2C45
Hatch, G. L., 1B128
Hathaway, L. R., 6H34, 6H38
Hattano, A., 2C45
Haumann, J. R., 5A2*C*
Hauser, E., 6F13
Hautke, P., 4F30
Havas, J., 4A15
Havlicek, J., 4H45, 5F47, 6C78
Havlik, B., 3H21
Hawkes, S. J., 3J36
Hawley, J. E., 2B52
Haworth, D. T., 1C30, 3F40
Hawthorne, A. R., 2J63, 5A5*C*, 6J42

Hayakawa, K., 3D45
Hayakawa, Y., 2E26, 6E19
Hayami, T., 2H24
Hayashi, M., 2D86
Hayashi, N., 6C74
Hayashi, S., 4J14
Hayashi, Tetsu, 1B17
Hayashi, Tokishi, 3D87
Hayashi, Tomonao, 2J116
Hayashi, Y., 3D23
Hayes, A. W., 5G23
Hayes, W. P., 2A18, 4A11
Heacock, R. A., 2C29
Healey, J. T., 5J43
Healy, M. A., 5J67
Heaney, J. B., 5J37
Heath, R. R., 3J11
Heathcote, J. G., 1F7
Heatherbell, D. A., 2F31
Hebbelinck, D., 5A3*C*
Hebert, N., 4D69
Hecht, S. S., 6D58
Hechter, O., 3D111
Hecker, W., 1B167, 1H25, 2B4
Hee, S. S. Q., 5G27
Heerma, W., 1E9
Hefendehl, F. W., 3F18
Hefner, A., 5J106
Hegedus, A. J., 4B125
Heibel, J. T., 3A1*C*
Heiber, O., 5A6*C*
Heidelberger, C., 3D132
Heidenreich, E., 5F19
Heidt, L. E., 1H2
Heiland, W., 6J45
Heimann, W., 4F36
Heindl, W., 5E3
Heineman, W. R., 2J131
Heinis, J. L., 5F3
Heinisch, G., 5E28
Heinrich, K. F. J., 2A1*C*
Heinrich, R. R., 5A5*C*
Heintz, M., 4C41
Heise, D., 1J59
Heisz, O., 4C77
Heitzman, M. W., 4E3
Helbert, J. R., 4A3*C*
Helfricht, R., 6J76
Helgheim, I., 4A1*C*
Helland, P., 6A1*C*
Hellendoorn, E. W., 5F4
Heller, G., 6B159
Heller, L. I., 5G15
Heller, R. S., 2A1*C*
Heller, S. R., 2A1*C*
Hellmann, H., 1H38, 2C59
Helm, D. A., 3A1*C*
Hem, S. L., 4E21
Hembree, G. G., 2J128
Hemmasi, B., 2D97
Hemsworth, B. A., 4A2*C*
Henden, E., 2B99
Hendriks, M. E., 3J34
Henkelmann, R., 5A5*C*
Henly, R. S., 6A1*C*
Henneberg, D., 2A6*C*, 6A1*C*
Henning, G., 5A6*C*
Henning, H.-V., 2D24
Hennion, M. C., 6B98
Henrichs, U., 2A6*C*, 6A1*C*
Henrion, G., 3B117
Henriques, A., 5H4
Henry, R. E., 5A5*C*
Henshaw, B. G., 3C70
Hensley, W. J., 4D37
Herak, M. J., 1B122, 2B104, 4B101
Herb, S. F., 1G3
Herber, R. F. M., 1D7
Herbold, D. R., 1D103
Hercules, D. M., 2A1*C*, 3B94
Herd, J. K., 4D75
Hergert, G. W., 4H25
Herman, A. W., 3D7
Herman, Z., 4E12
Hermelin, B., 3D57
Hernandez, M., 4B14, 4B133
Hernandez Mendez, J., 5D69
Herold, G., 4E27, 5E30, 5J23
Herpers, U., 2J155, 6B91
Herr, W., 6B91
Herrmann, R., 5B173
Hertz, H. S., 2H42, 6H51
Herve-Bazin, B., 1C81
Herwig, W. C., 4A3*C*
Herzig, H., 5J37
Herzinger, V., 3F45
Hes, J., 2D147
Hess, W. C., 5H45
Hester, D. W., 2E49
Hester, E., 2A1*C*
Hester, R. E., 3J80*B*
Hester, R. K., 2J104
Heveran, J. E., 2E25
Heyndrickx, A. M., 4G21, 5G14
Hezel, U., 2G25
Hibbert, D., 5G12
Hibbert, J. R., 1F7
Hickie, T. S., 5C52
Hickman, E., 4F28
Hidskes, G. G., 3F13
Hieftje, G. M., 1J45
Hierro, A. G.-G. L. de, 4A18
Hifnawy, M. S., 4E15
Highet, R. J., 2A1*C*
Higinbotham, E. V., 6A3*C*
Higuchi, S., 3D42
Hiiro, K., 2H40, 3B12, 5J92
Hikita, A., 4B45
Hildebrand, I., 1E8
Hildreth, D. M., 4H40
Hill, M. W., 5A5*C*
Hill, R. M., 5A2*C*, 6A1*C*
Hillenkamp, F., 2J112
Hilleret, N., 2B162
Hillerova, E., 1C15
Hillis, W. E., 2C68
Hillman, D. E., 1C82
Hillmann, G., 2D3
Hills, E. B., 1D15
Hilp, M., 6C4
Hinde, A. L., 1J108
Hines, W. G., 2A4*C*
Hinthorne, J. R., 4B70
Hinton, R., 5J104
Hintze, U., 3C21
Hinze, W. L., 2B125
Hippe, E., 5D90
Hirabayashi, N., 1J46
Hiraide, M., 1B36
Hiraki, K., 1B62
Hirata, F., 2D77
Hirota, K., 6B8
Hirsch, R. F., 2A1*C*
Hirschfeld, T., 2A1*C*, 5J61, 5J63
Hisanaga, A., 4B56
Hisata, T., 5D37
Hislop, J. S., 5A5*C*, 6B216
Hites, R. A., 5A1*C*
Hjoerne, N., 4A1*C*
Hladka, A., 1G19
Ho, D. K. M., 6A1*C*
Hobbs, A. S., 1D107
Hobo, T., 1H43
Hobson, D., 5A5*C*
Hocke, J., 5E13, 5J23
Hocquellet, P., 2D10, 6B113
Hodge, V. F., 4H23
Hodgkins, T. G., 2C18
Hodgson, G. W., 2A4*C*
Hodrejarv, H., 5B79
Hoefling, R., 2J30
Hoejlund-Nielsen, P. E., 2J128
Hoelzel, H., 5J46
Hoerder, M., 4A1*C*
Hoetzel, D., 5E25
Hoff, J. T., 4A3*C*
Hoffman, D. J., 5D23
Hoffman, J., 5D71
Hoffman, N. E., 3F40
Hoffman, R. A., 5J36
Hoffmann, B., 6D31
Hoffmann, D., 3D17, 6D58
Hoffmann, G., 2G2
Hoffmann, T. J., 6E32
Hoffmann, W., 1C78
Hoffmann-La Roche, F., & Co. Akt.-Ges., 3J2*P*
Hoffmann-Walbeck, H. P., 4H44
Hofman, P., 1C38
Hofmann, K., 5D75
Hofton, M. E., 4A4*C*
Hohmann, R. C., 1J110
Holaday, C. E., 5F14
Holak, W., 2F1
Holand, M., 2G11
Holboke, L. E., 2A7*C*
Holcomb, I. J., 6B176
Holding, S. R., 3J22
Holding, S. T., 2C50
Holl, W. W., 2E19
Holladay, D. W., 1J5
Holland, J. F., 2A1*C*
Holland, J. J., 1D40
Holland, W. J., 2B154, 6B26, 6B223
Holleman, J. W., 1J5
Hollemans, H. J. G., 6D1
Hollenbeek Brouwer-de Boer, S., 5D30
Hollenberg, K., 1J35
Hollifield, J. W., 2D71
Hollingdale-Smith, P. A., 4A4*C*
Hollinger, G., 6J44
Hollmann, G., 1D58
Hollowell, C. D., 3H1
Holman, G. M., 1G17
Holmes, M. G., 6F12
Holmstrand, J. H., 4D24
Holotik, S., 6A1*C*
Holstrom, G. B., 3A1*C*
Holtkamp, H. C., 1D39
Holtzman, J. L., 5A2*C*
Holtzman, R. B., 1A1*C*
Holzbecher, J., 2D22
Holzbecher, Z., 6B240*B*
Holzer, G., 6A1*C*
Honba, K., 2C7
Honda, S., 2C16, 2D59, 4C16
Hong Mai, P. T., 4D11
Honigberg, I. L., 2E49, 4E36

kavaara, E. I., 4A1*C*
kawa, T., 4B153
n, K. V., 4D59
old, G. R., 1F12
d, L., 2D113
gen, H., 4D50
per, D. L., 4F33
per, W. D., 3D34
irtean, E., 2C60, 3B59, 3J82, J83, 5B14, 5B23
kala, H., 4B8
kins, R. H., 5J36
pesch, J. P., 6H13
ak, J., 6B60, 6B86
i, M., 4H9
i, Y., 1B94
ickova, B., 3D104
imoto, Y., 1D11, 2A4*C*
iuchi, M., 6D64
iuchi, Y., 2C65
kay, K., 4B125
lick, G., 2A1*C*, 2J82
ning, E. C., 3G37, 6A1*C*, 6J66
ning, M. G., 5A2*C*, 6A1*C*
ovitz, C. T., 2B163*B*
rocks, D. L., 1J79
sley, W. J., 2J107
vath, G., 6C51
hika, Y., 3C26
hino, T., 4B45
kin, S., 3D90
kins, J. A., 2D94
te, J., 3B90, 4B50, 4D6, 5B50, B52, 6B36, 6D5, 6H5
ck, C. L., 2D53
gh, D. C., 4A4*C*
ston, L. L., 5J6
anessian, A., 6A2*C*
rind, H. R., 6A5
ward, G. A., 2D117
ve, J. R., 3A13
vell, S. M., 3H36
le, W. C., 5J102
beczy-Pall, A., 2H13
dil, J., 6J22
ina, P. D., 5D24
vnak, J., 4C13
tfiord, B. F., 5H42
, H. W., 2A5*C*
, S.-T., 1D8
ng, C. T. L., 2D84
ng, M. Del R., 3A10
ng, T. C., 4J39
ng, W., 1D104
bbard, D. P., 1H11, 2B19, 2C9
oer, C. O., 2A1*C*
oer, I., 5B108
oer, J. F. K., 4J12, 6A1*C*
oik, J., 1E11
k, H., 3D81
dzik, M., 5C58
bner, G., 2D157
bner, H., 2B68
ttemann, R. E., 3D38, 3E44
ffman, F., 2F14, 5H35
ffman, H. L., jun., 5F7
schmidt, M., 2A6*C*
ghes, G. N., 1J95
ghes, V., 5J55
gon, P., 4E45
llet, F. D., 5H3
sing, W. B., 5D91
anicki, A., 4B88, 5J88
ett, L. D., 5A5*C*
Human, J. P. E., 5J4
Humbel, R., 2D58
Humphrey, R. E., 2B125
Humphreys, I. J., 4E7
Hundt, H. K. L., 1D32, 4D15
Hung, Y.-W., 1C30
Hunt, D. C., 1C8
Hunt, D. F., 5J76, 6C11, 6C15
Hunter, I. R., 3J29
Hurlbut, J. A., 2H6
Hurley, R. G., 2A1*C*
Hurst, R. E., 2J29
Husain, S. W., 2B5, 2B6
Husar, J. D., 6H11
Husar, R. B., 6H11
Husek, P., 2D102
Husmann, H., 2A6*C*, 6A1*C*
Hussein, S. M., 5E20
Hussonnois, M., 5J110
Hutchinson, B., 2A2*C*
Hutchinson, T. C., 2A4*C*
Hutton, J. J., 2D161
Hutzinger, O., 2C29, 4D32, 6H56*B*
Huy Du, N., 4J15
Huygen, C., 6H12
Hwang, C.-H., 6C24
Hwang, J. Y., 2A1*C*
Hyakutake, H., 1D41

Ibrahim, G., 1D18
Ibuki, M., 5D58
Ichikawa, S. I., 2B72
Ichikawa, Y., 1E4
Idzu, G., 2D46
Ignatenkova, E. N., 1A11
Ignat'ev, V. S., 5B65
Ignat'eva, T. I., 1B168
Ignatov, V. I., 5B49
Ihnat, M., 2A1*C*, 5G37
Iida, C., 6B38, 6B120
Iida, T., 2D81
Iinuma, F., 1D65, 1D74
Ikawa, S., 6D53
Ikeda, N., 6B170
Ikels, K. G., 2A1*C*
Ikezawa, H., 2D155
Ilcewicz, F. H., 1A1*C*
Il'ichev, O. V., 6H46
Il'icheva, I. A., 5B32
Ilie, V. A., 3J49*B*
Il'ina, V. A., 4C40
Illes, S., 1G15
Illner, E., 1E51
Imaeda, K., 2B54, 3B67, 6B217
Imahashi, T., 5B174
Imai, H., 6C25
Imanari, T., 1D100, 3D45
Impens, R., 6G1
Inagaki, K., 3E27
Inagawa, T., 2D77
Inamori, T., 3B43
Ingle, J. D., jun., 2B52, 2J57, 2J95, 6J35
Inglis, A. S., 5J50
Ingols, R. S., 2A4*C*
Inoyatov, A., 1B46, 1B61, 4B98
Inoyatova, M. T., 1B96
Institute of Brewing, 3F28
Instrument Society of America, 3A14*B*
International Commission for Uniform Methods of Sugar Analysis, 2F51*B*
International Federation of Clinical Chemistry, 5D92
International Organisation of the Flavour Industry, 5F37
International Technical Information Institute, 3A16*B*
International Union of Biochemistry, 4C47
International Union of Pure and Applied Chemistry, 4A6, 4C47
Inturrisi, C. E., 2D30
Iofa, B. Z., 6B227
Ioffe, B. V., 5C3, 6A1*C*, 6H15
Ionescu, F., 3H11
Ionov, V. P., 5B210
Iordanov, N., 1B150
Iovenko, E. M., 2J144
Iovu, M., 3C30
Iqbal, M., 1B121, 6B228
Iqbal, Z., 6F29
Irizarry, J., 4C9
Irlweck, K., 2D12
Irudayasamy, A., 6D36
Isaeva, G. Ya., 4H46
Isaeva, L. K., 1C84
Isagai, Kazuyo, 3B39
Isagai, Kiyoharu, 3B39
Isakson, K. E., 2C76
Isberg, J., 5H4
Isemura, H., 2D140
Isenhour, T. L., 2A7*C*, 2J103, 5C10, 6A20, 6J61
Ishaq, A. F. M., 6B202
Ishibashi, M., 2D46, 6D47
Ishibashi, N., 5J95
Ishida, R., 3B48
Ishihara, H., 2D155
Ishii, K., 1C49
Ishino, F., 3B16
Ishitani, T., 2J111, 3B149
Iskenderov, M. G., 4B57
Islam, A., 5E47
Islam, M. A., 6F16
Isler, W., 6A1*C*
Ismael, N., 2B11
Ismaiel, S. A., 1E23, 1E37, 3E20
Ismail, A. A. A., 3D114
Isobe, M., 2D77
Isono, H., 1D10, 6D12
Iso'o, A., 1J18
Isozaki, A., 3H20
Israels, L. G., 1D94
Issa, F. M., 3B161, 5C34
Issa, I. M., 1B23, 5B132
Issa, R. M., 5B132, 5C34
Issa, Y. M., 3B161, 5C34
Issaq, H. J., 3B13, 3J61, 5H22, 6J57
Istvan, L., 1J39
Isupov, V. K., 4B132
Itami, T., 1D46
Itkin, Yu. V., 2B61
Ito, K., 2D100
Ito, Saburo, 3B53
Ito, Shinichi, 4B75
Ito, Yoshio, 3F20
Ito, Yuji, 2E33
Itoh, M., 6D47
Itoh, T., 2D81
Itoh, Y., 4B26
Itsikson, L. B., 1C34
Iturrian, W. B., 5D25
Ivanov, A. K., 5C1
Ivanov, A. V., 1C43

Ivanov, C., 5D73
Ivanov, Ch., 5E20
Ivanov, O. V., 2B36
Ivanov, S. A., 3D116
Ivanov, V. M., 5B204
Ivanova, I. F., 6B182
Ivanova, N. K., 1B142
Ivashentsev, Ya. I., 4B51
Ivashkiv, E., 4E24
Iverson, J. L., 4F38, 5F69
Iwaida, M., 2G30, 3F20
Iwanska, S., 4C85
Iwasaki, I., 3B119
Iwasaki, K., 4B38
Iwase, H., 2D103, 4C20
Iwata, T., 5D58
Iyer, A., 1A3
Izatt, R. M., 2A1*C*
Izawa, T., 2D46
Izotova, A. I., 4H7
Izumiya, N., 2D106

Jacini, G., 2F8
Jackman, R., 4D69
Jackson, A. F. J., 4E18
Jackson, D. A., 6J34
Jackson, K. W., 2A1*C*, 2H18, 6D10
Jackson, M. T., 2A1*C*
Jackson, W. A., 4H40
Jacob, E., 6D34
Jacob, J., 3D72
Jacobs, E. S., 4C65
Jacobson, J. S., 5G15
Jacoby, R. H., 4J25
Jacques, J., 4C38
Jaeger, D. A., 2C64
Jaeger, H., 2A6*C*
Jaenicke, S., 2G19
Jaensch, P., 6B208
Jafar, A. R., 5B207
Jaffe, J. M., 2D42
Jaffrezic, H., 6B230
Jagerova, H., 3C73
Jagiello-Puczka, W., 5B196
Jagner, D., 1J72, 5J98, 6H48
Jagodic, V., 1B122
Jain, A. V., 2G16
Jain, D. S., 1B120, 3B126
Jaklewicz, A., 4B73
Jakovljevic, I. M., 3J27, 6C48
Jalon Comet, A. G. de, 5F33
James, D. J., 4J33
James, G. W., 6H34
James, T. L., 6D71*B*
James, W. D., 5A5*C*
Jamieson, A. M., 1F17, 4A3*C*
Jamieson, G. R., 5F68
Jamieson, W. D., 4D32
Janak, J., 2J24, 3C24, 6A1*C*
Janauer, G. E., 2H31, 5B25
Janczarski, I., 2B7
Jandial, V., 2A3*C*
Jane, I., 2D26, 3E1
Janghorbani, M., 6J39
Janicka, K., 4C85
Janicki, C. A., 3J12
Janik, A., 3J45, 4J19
Jankauskas, J., 5B97
Janmohammed, M., 1B38
Janouskova, J., 1B95
Janowski, J. D., 2A1*C*
Jansen, J. T. A., 4G37
Janssen, G., 6E13
Janssens, M., 6H5
Jany, K.-D., 3D130
Jao, M. Y. T., 2C76
Jaredic, M., 6B4
Jarmany, H., 6J64
Jarv, J., 5C23
Jarzebinski, J., 6E6, 6E33
Jasinskiene, E., 5G7
Jaskolska, H., 1B83
Javaid, J. I., 3D30
Ja Whang, Kyu, 1B51
Jaworska, M., 6E6
Jaworski, J. F., 2J114
Jayasimhulu, K., 2D112
Jayle, M.-F., 1E20
Jayman, T. C. Z., 4G3
Jeanmaire, L., 5A3*C*
Jecko, G., 3B146
Jedrzejewska, H., 1B56, 4B46
Jeener, J., 5J69
Jeffreys, J. A. D., 3G18
Jellum, E., 4A1*C*, 6A1*C*
Jenkins, N., 5H1
Jenkins, R. A., 3D108
Jennen, A., 5H13
Jennings, R. W., 6G8
Jennings, V. J., 2J133
Jennings, W. G., 4J27
Jensen, B. H., 3F46
Jensen, J. B., 1B10
Jensen, K. M., 4D18
Jensen, T. E., 2A1*C*
Jentoft, R. E., 5A1*C*
Jeremic, D., 5C38
Jermyn, M. A., 4D33
Jerome, D. Y., 6B236
Jervis, R. E., 2A4*C*
Jespersen, N. D., 4D81
Jeter, D. T., 5D32
Jettmar, A. A., 2B2
Jewell, D. M., 6C62
Jianu, I., 4C61
Jie, M. S. F. L. K., 2C20, 3C17
Jimenez, A. T., 1H5
Jimenez, F. S., 4B133
Jindal, S. K., 2C33
Jintakanon, S., 1G10
Jirka, A. M., 3H30
Jodl, R., 3C69
Joensson, J. A., 4J3, 4J32
Joensson, R., 4J32
Joglekar, V. D., 3E9
Johansson, B. W., 4A1*C*
Johansson, G., 5A5*C*
Johansson, Gillis, 2B91
Johansson, S., 4G23
Johansson, T. B., 1B6, 3B100, 5A5*C*
John, M. K., 3G8
John, R., 1D62
Johnson, A. H., 4H25
Johnson, C. B., 2F47
Johnson, C. R., 4D39
Johnson, D. J., 2A1*C*, 2J88, 5B5
Johnson, D. L., 5A3*C*
Johnson, E. R., 2A1*C*
Johnson, G. E., 4D30
Johnson, G. F., 3D35
Johnson, G. G., jun., 1J105
Johnson, James Donald, 3H50*B*
Johnson, John Douglas, 2A1*C*
Johnson, K. L., 5D32
Johnson, R., 3E25
Johnson, W. F., 5A2*C*
Johnson, W. R., 2J146
Johnson, W. W., 2D52
Johri, K. N., 1B19, 1B115, 6B68
Jolly, R. C., 5F32
Jones, A. R., 3J7*P*
Jones, B. E., 2E55
Jones, C. E., 4G6
Jones, C. E. R., 3C78
Jones, D. O., 5J78
Jones, D. R., IV, 3A6, 3C29
Jones, G., 5D89
Jones, J. B., 2J61
Jones, J. B., jun., 2D5
Jones, M. M., 2H37
Jones, P. R., 2J15
Jones, R. G., 6C21, 6C23
Jonkman, J. H. G., 2D1, 2D25, 5D30
Jonsson, M., 6A2*C*
Jordan, B. J., 1D23
Jordan, J., 1D38, 2A1*C*, 3D122
Joron, J. L., 6B230
Josefsson, B., 4H33, 4H34
Joseph, P. T., 3B167
Josephson, R. V., 6F19
Joshi, B. C., 1A3
Joshi, L. K., 3G25
Joshi, S. B., 1J31
Joshipura, P. B., 2A1*C*
Jovanovac, L., 2B37
Jovanovic, D. A., 4G25
Joy, J., 2E30
Jozefowicz, B., 5C47
Jozwiak, K., 4B165
Juell, A., 4A1*C*
Juenger, E., 2G34, 6B1
Jukofsy, D., 3D49
Julin, B. G., 6A1*C*
Julshamn, K., 5F6
Jun, H. W., 5D25
Jungalwala, F. B., 1D51
Jupille, T. H., 3J23
Jurand, J., 3E21
Jurek, A., 3D88
Jurinski, N. B., 2A21
Jurs, P. C., 3A11
Juselius, R. E., 1D13
Jusiak, L., 2E4
Justice, E. L., 4E36
Juvani, M., 4A1*C*
Juznic, K., 6B99

Kaal, M., 3F37
Kaaz, H., 1A1*C*
Kabachnik, M. I., 1B79
Kabanova, O. L., 2B50
Kabeiya, F., 6B158
Kaboulov, B. D., 1C48
Kachur, L. D., 4H38
Kachurin, O. I., 4C45
Kadieva, S., 1B150
Kadin, H., 1E19
Kadish, K. M., 3E14
Kadono, T., 1J18
Kadyrov, Ch. Sh., 3G27
Kaegler, S. H., 1C57
Kafka, Z., 6C60
Kagehira, S., 2D155
Kahan, J., 2D134
Kahl, M., 1B15
Kahn, D. R., 3F40
Kahn, R., 2D119

nt, W.-D., 1F9
F., 3B14
ger, I. R., 2B132
no, F., 2B15
ko, R. F., 2D30
nal, P. M., 4G35
nz, G., 6H33
er, D. G., 3D77
er, G., 5B80
er, H., 2A1*C*
er, I. I., 3D107
er, K. L. E., 2A4*C*
er, R. E., 2A6*C*, 6A1*C*
to, T., 2E33, 3E40
fez, F., 2E37
ar, Y. P., 5H26
ehi, K., 2C16, 2D59, 4C16
iyama, H., 1B24
ovskii, I. A., 6B37
a, L., 1B45, 4B37, 5B71
ab, P., 4J7
ak, I. S., 5G8
an, B. Ya., 6B149
andra, O., 1B153
ashnikova, E. V., 3C14
ibjian, R., 2J28
icki, A., 4B107
inin, B. D., 6B35
inowski, D., 3F17
jurand, M., 6A1*C*
man, B. J., 3D101
tos, G. J., 1H17
nikova, R. V., 4B135
nutchi, G., 2C49, 2C58
nykova, I. S., 1B164, 4B55
nicky, D. J., 2A1*C*
pus, V., 2J9
ushkova, M., 2E20
usova, L., 2H12
vanaraman, S., 3B168, 3C10, B56
nada, T., 2H21, 3E39
nala, T. R., 6D36
narzin, A. A., 5A6*C*
nat, S. S., 3E9, 6E17
nath, N. S., 5J64
nbara, Tomihisa, 4B93
nbara, Tomihito, 1B47, 4B26, C58, 5J93
nei, A., 2D100
nenskii, Yu. V., 5B149
ninskii, A. Ya., 1C39
niya, A., 6H9
nmann, G., 2E12
np, P. E., 6E5
np, R., 5D31
nra, L. C., 4B161
ada, Y., 1D65
aev, N. A., 5B184
aoka, Y., 2D128
atharana, P., 2A1*C*
da, M., 1B94, 3C67
da, T., 2D29
da, Y., 1D10, 6D12
drnal, J., 1B39
eda, Y., 2G30
eko, M., 2F4, 2H30
ellopoulos, A. G., 5A7*C*
ert, G. A., 4B162
ia, K., 5B189
ibolotskii, V. A., 5H38
man, S., 3D26
no, S., 2F3, 2F4, 2H10, 2H30
o, H., 2D105
Kantor, E. J., 4G29
Kantor, H. S., 4D39
Kantuscher, E., 2B75
Kao, L. W., 2B111
Kapel, M., 3B133
Kapila, S., 1J23, 6A1*C*
Kaplan, M. L., 3J72
Kaplan, N. O., 5A2*C*
Kaplanova, B., 1C6, 6B33
Kaplin, A. A., 3B10, 4B36, 4H28
Kapoor, H. L., 5B101, 5B102
Kapoor, S., 4B91
Kapoor, S. K., 3B91, 6B93
Kaps, T., 4C73
Kapushkin, I. I., 1J68
Karabanov, N. T., 5J30
Karahasanoglu, A. M., 1D92
Karasek, F. W., 2C42, 3C20
Karawacki, E., 1J62
Karawya, M. S., 4E15, 5E15, 5E16
Karger, B. L., 2A1*C*
Karibyan, E. E., 4B95, 5B36
Karig, F., 6E20
Karin, R. W., 6J1
Karjalainen, E., 4A1*C*
Karjalainen, U., 4A1*C*
Karkhanavala, M. D., 5A6*C*
Karkocha, I., 3F25
Karlhuber, B. A., 2G26
Karlik, B., 6E18
Karlinski, T. J., 2A1*C*
Karlsen, J., 3C66
Karlsson, J., 5D88, 6A2*C*
Karmas, E., 2F26
Karmen, A., 6A1*C*
Karol', L. S., 4B76
Karolus, J. J., 3D105
Karoum, F., 4D52
Karpenko, L. I., 6B59
Karplyuk, A. I., 1B177
Kartseva, T. V., 1C33
Kartseva, V. D., 2E18
Karyakin, A. V., 1B166, 5B94, 5H19
Karzina, L. S., 1C39
Kasa, I., 1B44
Kashi, K. P., 6H24
Kashiki, M., 4C54
Kasiura, K., 4B31
Kassim, A. Y., 5A9
Kasuya, K., 3E40
Katagiri, H., 2A3*C*
Katagiri, M., 5D76
Katagiri, Y., 2H10
Kataoka, M., 5J93
Katayama, N., 5H12
Kathpal, T. S., 4G33
Kato, I., 1J101*P*
Kato, K., 2E13
Kato, M., 2J161
Kato, Taiji, 1D72
Kato, Takahiko, 1D82
Kato, Tetsuo, 2D106
Kato, Toyoaki, 2B149, 5A5*C*
Katsanos, N. A., 3J35
Katskov, D. A., 3J59, 5J51
Katyal, M., 1A6
Katz, M., 4H15
Katz, S., 4C30
Kaufman, C., 1D55
Kaufmann, K.-D., 5D74
Kaufmann, R., 2J112
Kaul, P. N., 1E33
Kauppinen, J., 2J102
Kaushik, R. C., 3B4
Kawabata, T., 4F5
Kawabuchi, K., 6B49
Kawagaki, K., 1B57, 1B179
Kawaguchi, H., 2D143, 3B62
Kawahara, A., 2H40, 3B12
Kawai, S., 2D155, 3D87
Kawakami, Y., 5B174
Kawamoto, H., 5H18
Kawatkar, S. G., 1B172
Kawauchi, H., 6D61
Kawauchi, S., 2H24
Kay, J., 3D131
Kay, J. M., 6F16
Kaye, B. H., 5A7*C*
Kaye, W., 2J97
Kaysser, B., 1B176
Kazakov, B. I., 5B198
Kazantsev, E. I., 6B78, 6B143
Ke, P. J., 2A4*C*, 4F33
Kealey, D., 6A21*B*
Keattch, C. J., 1J91*B*
Keddy, R. J., 5B116
Keen, G., 4G11
Keenan, J. A., 2A1*C*
Kegel, J., 3H22
Kegel, M., 5C45
Keil, L., 5J90
Keil, R., 2H29
Keilich, G., 2D130
Keiser, L. S., 4G34
Keliher, P. N., 2A1*C*
Keller, Helmut, 1B157
Keller, Herbert, 1D2
Keller, R. A., 2A1*C*
Kelley, B. C., 3D112
Kelley, M. T., 5A5*C*
Kellner, A., 4C59
Kellner, R., 4C49
Kelly, R. W., 4D40
Kember, D., 6B32
Kemula, W., 5A6*C*, 5C33
Kendall, J., 4D51
Kende, A. S., 6C99
Kenia, O. T., 5G1
Kennedy, B. P. C., 4F23
Kenner, C. T., 1E40, 6B135
Kenshi, H., 2D122
Kenyeres, S., 5A6*C*
Kerbyson, J. D., 2B32
Kerentseva, V. P., 3B165
Kerrigan, G. C., 4H3
Kerven, G. L., 1G10
Kesselring, U. W., 5E26
Kester, D. R., 2H37
Ketrush, P. M., 5B216
Keun, Lee Yong, 1B51
Khabalova, O. S., 4C12
Khadeev, V. A., 5B10
Khadikar, P. V., 1B42
Khafagy, S. M., 1E12
Khaidarov, A., 4B22, 4B124
Khain, V. S., 5B84
Khalil, S. A. H., 4A2*C*
Khamidov, B. O., 5B208
Khamrakulov, T. K., 5B12, 6J72
Khan, A. A., 4A3*C*
Khan, A. Aziz, 1B30
Khan, A. M., 6B202
Khan, M., 1D50
Khan, M. A., 3B106
Khan, S. U., 1G14, 4G22, 6G6
Khanturgaeva, G. I., 2B97

Kharat, R. B., 3B24, 3B159, 4B164
Kharchenkova, V. D., 3C74
Kharin, A. N., 2B83
Kharitonov, V. V., 5C35
Kharitonova, M. V., 2B55
Khatamov, D. R., 4B49
Khatamov, Sh., 4B49
Khattab, M. A., 5B132
Kheifets, V. I., 1C40
Khel'p, K. D., 6H14
Khera, U., 3C37
Khlyupina, L. L., 1B92, 4B151
Kho, B., 3E25
Kho, G. L., 1E34
Khokhlov, V. N., 1C60
Kholdyakov, N. I., 1C53
Kholevinskaya, L. V., 3B54
Kholmogorov, S. N., 6B3
Kholmovskaya, N. I., 5C3
Khomenko, V. A., 5C31
Khomyakov, G. K., 4B42
Khopkar, S. M., 2B128, 3B168, 4B60, 6B56, 6B142
Khristoforov, V. A., 6H46
Khristova, R., 3J85
Khrustaleva, L. A., 1B154
Khudaverdyan, D. Kh., 4B18
Khudyakova, T. A., 6A14
Khvorostukhina, N. A., 2B155
Khvostikova, A. A., 3C7, 5H16
Khym, J. X., 5A2*C*
Kiba, S., 3C39
Kiba, T., 4B111
Kiboku, M., 3D14, 3D27, 6B171
Kidani, Y., 3E27
Kidder, D. E., 5D102
Kidder, R. J., 3A1*C*
Kiefer, H. C., 4D39
Kiefer, W., 4J53
Kiermeier, F., 4F8
Kiesel, E., 2C54
Kiesl, W., 1A13
Kiessling, R., 6J77
Kiezel, L., 1C70
Kigasawa, K., 5D58
Kiigemagi, U., 3D52
Kiisler, K., 4C83
Kikta, E. J., jun., 4C22, 6A1*C*
Kildeberg, P., 4A1*C*
Kilgour, R. J., 3H12
Kilk, I., 5B62
Kilroe-Smith, T. A., 2D19
Kim, C. H., 4B119
Kim, K., 5A2*C*
Kim, K. S., 2A1*C*
Kim, S. H., 2C42
Kim, S. M., 1A1*C*
Kimbrough, R. D., 6G8
Kimmer, W., 1C78
Kimura, S., 1D72
Kindsvater, J. H., 3J40
King, D. E., 6D17
King, G. C., 2J5
King, G. S., 6D43
King, J. R., 2D56
King, J. W., 2J38
King, L. A., 2E27
King, R. M., 2J113
Kinghorn, A. D., 1D48
Kinhikar, G. M., 3B102
Kinoshita, K., 1H35
Kinoshita, T., 1D65, 1D74
Kint, J. A., 3J19
Kips, R. H., 2G23
Kirchhoefer, R. D., 4E13
Kireva, A., 6B186
Kirichenko, E. A., 3C28, 6C37
Kirichenko, N. P., 2B106
Kirihara, H., 4B127
Kirillov, A. I., 1B72, 2B64, 5B93
Kirillova, T. V., 5C25
Kirillova, Z. P., 1B64
Kirin, I. S., 4B132
Kirk, M., 6B218
Kirkbright, G. F., 1B91
Kirkland, J. J., 2A1*C*, 5J11, 6A1*C*, 6J6
Kirkpatrick, G. A., 5A4*C*
Kirschenbaum, D. M., 1D79, 5D77
Kirsten, W. J., 6J19
Kirstukas, I. P., 4B86
Kiselev, A. V., 3C14, 3J33
Kiseleva, O. A., 4B13, 5B190
Kisel'gof, G. V., 4B109
Kishi, T., 1D10
Kishkite, M., 6B139
Kislov, A. M., 5F9
Kislova, I. V., 5F9, 6B169
Kiss, E., 2B78, 2B79
Kiss, L., 4H6
Kiss, T. F. A., 6B5
Kister, G., 3E10, 6E3
Kit, O.-A., 6D34
Kitaev, G. A., 2B115
Kitahara, K., 4B134
Kitahara, S., 1C42
Kitaoka, Y., 3D110
Kitazume, E., 2B149
Kitchen, B. J., 5J21
Kittinger, G. W., 1D93
Kitts, W. D., 4D48
Kiuchi, K., 5F65
Kiuchi, T., 4B112
Kiwan, A. M., 5A9
Kiyota, C., 1E4
Kizer, K. L., 2A1*C*
Kkolos, E., 6E38
Kleeberg, H., 5J109
Kleeman, J., 4D73
Klehr, E. H., 3A3
Klein, M. P., 2J107
Klein, P. D., 5A2*C*
Klein, W., 6C98
Klein Elhorst, J. T., 5D20
Kleinmann, I., 2J69
Kleinovskaya, M. A., 6C90
Klemm, G., 1J12
Kleverlaan, N. T. M., 5H34
Klibus, A. Kh., 6B209
Klimecki, W., 5B196
Kliment, V., 3C55
Klimisch, H.-J., 2D15
Kling, O. R., 3D75
Klingenberg, K., 4C75
Klitgaard, N. A., 6D40
Kloer, H.-U., 2A6*C*
Klopper, A., 2A3*C*
Klopstock, J., 6C85
Klostermeyer, H., 1F14
Kluger, F., 1A13
Klus, H., 2D90
Klyan, A. A., 5B152
Klyucharev, A. P., 2B89
Kmetova, J., 1B127
Knapek, R., 6G11
Knapp, D. R., 4C21
Knapp, G., 1C1, 1C2, 2B14
Knauer, H. E., 3C44
Knazko, L., 1E1, 5E48
Kneebone, B. M., 1H7
Kneip, T. J., 5D10
Knell, W. L., 5J118
Knevel, A. M., 4E21
Kniseley, R. N., 1B144, 2A1*C*
Knob, M., 5D56
Knobloch, P., 1A8
Knott, A. C., 4B169
Knowles, D. J., 2B114, 5B158
Knox, J. H., 3E21, 6A1*C*
Knuckles, B. E., 4G14
Knudson, C. L., 2B51
Knuefermann, H., 6A2*C*
Knuppen, R., 4D50
Knust, E. J., 6C41
Knutti, R., 3J15
Knyazev, V. N., 5C26
Kobayashi, H., 5D76
Kobayashi, N., 2C7
Kobayashi, Y., 4H9
Kobel, K., 6J4
Kobrina, V. N., 6C40
Kobylczyk, K., 2C25
Kocaba, R., 5B142
Koch, F. A., 2J128
Koch, H., 6E26
Koch, K.-H., 4B142
Koch, J., 1F1, 2C80, 3F39
Koch, O. G., 1B151
Koch, W. F., 2J143, 3A4, 5J102
Kocherezhkina, E. I., 5J44
Kocherzhinskii, Yu. A., 5A6*C*
Kocheshkov, K. A., 6C38
Kochetov, V. A., 6C37
Kochhar, M. M., 4D17, 6D27
Kochkanyan, R. O., 5B2
Kodama, K., 4B127, 6B112
Koel, M., 6A1*C*
Koelsch, R., 1D99
Koenig, Hans, 4C60
Koenig, Hartmut, 3B134, 4B152, 4B156
Koenig, J. L., 2A1*C*
Koenig, Paul, 6B208
Koenig, Peter, 4B106
Koev, A. P., 1B67
Koeva, M., 5B53
Kofler, A., 5E3
Kofoed, B., 2D154, 4A1*C*
Kogan, L. A., 3J44
Kogan, M. J., 2A1*C*
Kogan, N. B., 3B157
Koglin, B., 1J92, 5J115
Kohli, J. C., 2D80, 6C56
Kohli, N., 1B158, 1B173
Kohli, R. M., 1B173
Kohn, M., 3J14
Koide, S. S., 1D106
Koike, H., 3E27
Koike, K., 3C26
Koiro, O. E., 1B79, 6B106
Koirtyohann, S. R., 2A1*C*, 3B107, 3D5, 5A5*C*
Koizumi, H., 3J64
Kojima, H., 1B63
Kojima, S., 1C69
Kojima-Sudo, A., 5D62
Kokavecz, B., 1J53
Kokk, H., 5B29
Kokot, Z., 5E44
Kolakowski, E., 3F11
Kolb, B., 6A1*C*
Koleva, M., 2E23

Iolihova, D., 1B95
Iollig, H. P., 5H23
Iolobashkin, V. M., 6H46
Iolokolov, B. N., 3C34
Iolomiitsev, M. A., 3D6, 6B229
Iolonits, P., 4C18
Iolos, E., 4C18
Iolosova, L. P., 5B212, 6B222
Iolotov, V. P., 2B87
Iolsky, V., 3B104
Iolthoff, I. M., 6A17
Iolycheva, N. V., 1C84
Iomae, H., 6C74
Iomar', N. P., 3B144
Iomarova, K. A., 5G8
Iomissarenko, V. P., 2C27
Iomiya, K., 2H24
Iondo, T., 2J111, 3B149
Iondratenko, L. A., 6B131
Iondrat'eva, L. I., 1B65
Iondrat'eva, T. M., 5B103
Ionev, A. V., 4B17
Ionishi, K., 1B116, 2C65
Ionishi, S., 4H21
Ionishi, T., 1J78
Ionno, K., 6B172
Ionno, T., 2J121
Iono, M., 6D54
Iono, T., 3B11
Ionobu, K., 3D126
Iononenko, L. I., 4B54, 6B83
Iononenko, V. E., 5B2
Ionovalov, E. A., 2B130
Ionowalchuk, H., 5A7*C*
Ionstantinova, R. B., 3G7
Ioop, L., 5F23
Iopanskaya, L. S., 3B64, 6B162
Iopp, M. K., 2J148
Iopusov, L. I., 1C75
Iopwillem, A., 2D111, 5D88
Iorenaga, T., 4B139
Ioreshkova, R. I., 5C42
Iorkisch, J., 1H28, 2B68, 2H27, 3H31, 5H20, 6B100
Iornel, L., 3D84, 5D60
Iorol', A. N., 6C38
Iorolenko, L. I., 6B122, 6B123
Iorolev, Yu. N., 3E19
Ioroleva, T. A., 5B48, 6B31
Ioroleva, T. V., 6C90
Iorol'skaya, Z. N., 6B201
Iorosi, J., 1B44
Iorotkaya, E. D., 6B209
Iorovin, V. A., 5C41
Iorpi, J. A., 3J12
Iorshunov, I. A., 5C22
Iorshunova, S. P., 6B58
Iorte, F., 6C98
Iorthoven, P. J. M., 1B101, 3J92
Iorus, A., 4J31
Ioryttsev, I. A., 4B51
Iosarev, V. M., 6B69
Ioshimizo, T., 2H30
Ioshy, K. T., 3D77
Iosik, M., 6A1*C*
Iosikowski, F. V., 5F32
Ioski, R. G., 3D37
Iosmatyi, E. S., 5H38
Iosonen, P. O., 5A12
Iosovich, J. K., 2J137
Iossykh, V. G., 3B20, 5B156
Iost, D., 1G16
Iostenko, I. G., 5B121
Ioster, D. F., 2J46
Koster, P. B., 5G12
Koster-Otte, L. J., 5D91
Kostetskii, E. Yu., 5D54
Kostikov, A. P., 5B41
Kostromin, A. I., 6A13
Kosturiak, A., 6B203
Kotani, N., 3B151
Kotarski, A., 6G10
Kotelyanskaya, L. I., 1B32, 3B44, 4B94, 6B40
Kotenko, E. F., 5C41
Kotlarevskii, I. L., 4B160
Kotok, L. A., 1C52
Kotova, V. N., 3C83
Kotrly, S., 1B43
Kotsuji, K., 4J14
Kotsy, J., 2E6
Kotter, L., 5F25
Kouchiyama, K., 4B90
Kouimtzis, T. A., 2B59
Kousaka, Y., 5J122
Kovac, J., 1G19, 2G27
Kovac, T., 2E37
Kovach, A., 3J21
Kovacigova, J., 2G33
Koval'chuk, L. P., 5B176
Kovalenko, A. A., 3B57
Kovar, K. A., 4E2
Koveshnikova, T. A., 6J51
Kovtun, N. P., 4B2
Kowalewski, Z., 2E10
Kowalska-Kiedik, A., 6C29
Kowalski, B., 3F9
Kowalski, B. R., 3C41, 6A19
Kowalski, P., 5J56
Kowalski, S., 5B33
Kozaki, Y., 1C42
Kozarac, Z., 6C5
Kozima, I., 3C26
Kozlov, S. T., 2J32
Kozlov, V. A., 5C36, 5C37
Kozlova, N. E., 1B35, 3B45
Kozu, T., 2D29
Kozuka, H., 6D12
Kracher, A., 1A13
Kracmar, J., 3E36, 4E8
Kracmarova, J., 4E8
Kraemer, E., 2J12
Kraft, R., 1D19
Kragten, J., 1B85
Kraj, W., 6J75
Kral, M., 6B240*B*
Kralj, B., 4C1
Kramer, F., jun., 3A1*C*
Kramer, K., 1J53
Kramer, V., 4C1
Kramer, W. E., 5J36
Krampl, V., 1G19
Krasiejko, M., 1B48
Krasiejko, T., 6C95
Krasil'shchik, V. Z., 5B85
Krasirov, N. D., 3C15
Krasnov, A. I., 5B166
Krause, J., 2D44
Krause, P. W., 4C68
Kravchenko, T. B., 1H30
Kravtsova, V. I., 1B148
Kravtsova, Z. N., 4B97
Krawczyk, D. F., 2A4*C*
Kray, A. M., 1J69, 6B145, 6B147
Krebs, W. M., 5F54
Krein, O. E., 2B130
Kreingol'd, S. U., 5B54, 5B117
Kremenskaya, I. N., 2B36
Kremer, B. P., 3C11
Krenkel, P. A., 4H48*B*
Kreshkov, A. P., 1A11, 2B97, 3B96, 3C28, 5B122, 6B163
Kressin, I. K., 3B86
Kreutger, H. H., 3D125
Kreuzig, F., 6E14
Krieger, H. L., 1A1*C*
Kringstad, R., 3D58
Krishna, K. S., 1A4
Krishnamurthy, N., 1B26, 2B127, 6C46
Krishnamurty, G., 3H5
Krishnamurty, H. G., 6D2
Krishna Reddy, Y., 1B163
Krishnaswami, L., 6D2
Krisman, C. R., 1D89
Kristensen, H. G., 5A7*C*
Kritchevsky, D., 1D4
Krivakova, M., 6J22
Krivan, V., 3B21, 5B168
Krivenkov, B. E., 2J53
Krivokhizhina, L. A., 4B163
Krivolapov, S. S., 1C33, 1C40
Krizan, Maria, 6B177
Krizan, Mojmir, 2J105
Kroehn, R., 3F39
Kroeller, E., 3G21
Kronborg, O. J., 2H5, 6G4
Krostko, V. S., 6B69
Krot, N. N., 6B102
Krtil, J., 6B27
Krudop, W. L., 2A1*C*
Krueger, C. W., 3D4
Krueger, E., 5F55
Krueger, S., 4C21
Kruell, F., 3C69
Krugers Dagneaux, P. G. L. C., 5D20
Kruglik, G. Z., 6C40
Kruglikova, L. P., 3J59, 5J51
Krukovskaya, E. L., 2B132
Krull, L., 3G21
Krupa, J. C., 5J110
Krupcik, J., 4C13, 6A1*C*
Krupskaya, L. A., 5B63
Kruse, K. M. M., 2J99
Kruse-Jarres, J. D., 1D49
Kruus, J., 2A4*C*
Kruzhkova, N. G., 2E18
Kryger, L., 5J98
Krylov, V. N., 1B78
Krysciak, J., 1D70, 1D71
Krzeminska, A., 4E30
Krzyzanowska, H., 6J28
Krzyzanowska, M., 1B59, 6B77
Kuban, V., 1B29
Kubecova, V., 3C24
Kubelka, V., 3C53, 5C11
Kubes, G., 3C71
Kubovicova, T., 6E24
Kucera, E. T., 5A5*C*
Kucera, M., 5E8
Kucera, P., 3J9, 6A1*C*
Kucerova, H., 5E8
Kuchhal, R. K., 6C16
Kuck, J. C., 2G9, 3F50
Kuczynski, J., 4C23
Kudinov, I. B., 5A6*C*
Kudreiko, I. I., 1B145
Kudrenko, V. V., 5B191
Kudrnacova, J., 1E11, 3D59
Kudryavskii, Yu. P., 6B78, 6B143
Kueppers, F. J. E. M., 1E9

Kues, H. A., 5J70
Kuga, K., 3B110
Kugler, E., 2A6*C*
Kugucheva, E. E., 3C50
Kuhlman, C. F., 4E31
Kuhn, H., 2D90
Kuhnert-Brandstaetter, M., 5E3
Kuhnhardt, C., 4F12
Kuhnke, G., 1E43
Kujawski, H., 3D82
Kukibaev, T. U., 3B97
Kuksis, A., 3D73, 4F35
Kukushkin, E. P., 5C35
Kukushkina, I. A., 3C81
Kulakov, V. N., 6C54
Kulapina, E. G., 5H31
Kulbe, K.-H., 6J76
Kulczycka, J., 6C69
Kuleshova, O. D., 6B23
Kulik, O. G., 5A6*C*
Kulikova, L. D., 2B156, 5B214
Kulikova, O. I., 5B32
Kulkarni, V. T., 6B105
Kul'kina, L. P., 4A19
Kullik, E., 6A1*C*
Kumamaru, T., 2H21
Kumaneva, G. A., 2B36
Kumar, A., 5B129
Kumar, N., 1C12
Kumar, R., 5B18
Kumar, S., 1C28, 5C21
Kumazawa, K., 2D105
Kummer, J., 5A3*C*
Kuncir, J., 2B53
Kuncl, K., 2B138
Kunin, V. T., 6B24
Kupfer, M., 6H54
Kuptsov, V. M., 3B74
Kuras, M., 3C53
Kurbatov, D. I., 4B103, 6B136
Kurchenko, T. V., 6B6
Kurenkov, V. F., 3C81
Kurepa, G. A., 3B68
Kurihara, S., 4B40
Kuriki, T., 2B54, 3B67, 6B217
Kurinov, A. D., 2H17, 3B147
Kurnikova, V. P., 6B222
Kuroda, R., 4B112, 5B160, 6B49
Kurokawa, M., 2F4
Kurowski, S., 5C29
Kurtova, I. V., 1B114
Kurz, J. L., 6H1
Kurzawa, Z., 4B23, 4C93
Kusakabe, M., 2B108
Kusalasai, K., 1D56
Kushchevskaya, N. F., 2B151
Kusnir, J., 3D33
Kusovkin, V. A., 6A1*C*
Kusuyama, T., 1B116
Kutyrev, I. M., 4B102, 5B153
Kutyrevan, G. A., 5B156
Kuwana, T., 2J92
Kuzay, P., 1C78
Kuz'micheva, M. N., 6H19
Kuz'min, I. M., 1B141
Kuz'min, V. A., 2J144
Kuz'mina, N. N., 3B55
Kuznetsov, E. V., 3C81
Kuznetsov, M. A., 6A1*C*
Kuznetsov, V. V., 3B96, 6B163
Kuznetsova, T. I., 6C37
Kuzovkin, B. I., 1B49, 2B31
Kwan, P. W. O., 1B52
Kwapiszewski, W., 2D107
Kwok, S. C. M., 5F34
Kyazimova, G. P., 5C16
Kyu Ja Whang, 1B51

Laas, T., 4J10
Laban, G. A., 2H32
Labbe, M., 2B148
Labeyrie, N., 6B113
Labrie, J. P., 5B154
Lachance, M.-A., 3D129
Lachowicz, E., 2C21
La-Croix, D. E., 6F20
LaCross, G., jun., 3D4
Laenzlinger, U., 3F33
LaFleur, P. D., 3H16, 5A5*C*
Lafont, J., 6F6
Lafont, P., 6F6
Lafosse, M., 1C18, 3C9
Lagerstroem, P.-O., 2C40, 6C47
Laguitton, D., 6J37
Lahaniatis, E. S., 6C98
Lahiri, S., 5B175
Laine, E., 5A6*C*
Laitinen, H. I., 2B84
Lakhtar', A. N., 1B146
Lakin, H. W., 4B110
Lakshminarayana, V., 3F21
Laktionova, N. V., 5B94
Lal, K., 1B25, 5B201
Lamb, C. J., 5D95
Lambert, J. L., 1B82, 1B128
Lamey, S. C., 6J9
Lamothe, P. J., 2A1*C*
Lamotte, A., 6J14
Lamparelli, F., 4F37
Lanbina, T. V., 4B159, 4B160, 5B211
Landini, M., 1C35, 2C34
Lando, L. I., 5B191
Landrum, P. F., 6G9
Landry, J. D., 2J128
Lane, D. C., 5H8
Lang, B., 6C86
Lang, C. J., 5H7
Lang, I., 3C45
Lang, L., 3J79*B*, 6J67*B*
Lange, E., 5C43
Langel, J., 5C23
Langford, C. H., 2A4*C*
Langlais, R., 2A6*C*
Langova, M., 1B29
Lankmayr, E. P., 1B124
Lankosz, M., 6B238
Lannoye, R. A., 4H16
La Notte, E., 4F37
Lansden, J., 5F14
Lantto, O., 1D34, 1D57
Lanzani, A., 2F8
Lao, R. C., 1H6, 5A3*C*, 6A1*C*
Laperashvili, L. Ya., 1J21
Lapitskaya, S. K., 4F2, 6B50
Lapshina, L. A., 2B120
Larach, S., 5B9
Larin, N. V., 5B8, 5B114, 5B152
Larina, L. K., 5B78
Larionov, V. R., 5D81
Larmann, J. P., 2A1*C*
Larose, R. H., 2H35
La Rotonda, M. I., 5F40
Larsen, N.-E., 2D35
Larsen, N. R., 5D106, 5H25, 5J89
Larsen, R. P., 1A1*C*, 2B69
Larson, G. F., 2A1*C*
Larson, H. P., 4J47
Larson, J. G., 3A1*C*
Larson, J. O., 2C51
Larson, R. A., 3H36
LaRue, B. M., 6C67
Lasa, J., 4J31
Lascelles, P. T., 5D19
Lasch, J., 1D99
Laseter, J. L., 1D3, 3D2
Lashko, N. F., 5B19
Lasota, O., 5J101
Lasovsky, J., 5B187
Lastovkova, M., 3E8, 4E8
Laszlo, F., 5A6*C*
Laszlo, P., 1J39
Latham, A. N., 2D65
Latham, D. R., 2A7*C*
Latkina, L. L., 4H30
Latner, A. L., 6A2*C*
Latysheva, Yu. P., 2B158
Latz, H. W., 5D78
Lau, H. K. Y., 6D4
Lau, L. S., 2C68
Lau, O. W., 1C77
Lau, S. S., 2A1*C*
Laub, E., 2C14
Laub, R. J., 6A1*C*
Lauer, H. H., 6A1*C*
Lauer, R. S., 6B90
Laurent, A., 3E3
Lauritzen, R., 4A1*C*
Lausch, J., 3B51
Lautenschlaeger, W., 4E2
Lauwerys, R., 5A3*C*
Laver, G. W., 5F45
Laverdant, C., 2D125
Lavrakas, V., 1B112, 2B109
Lavrenova, A. S., 4C14
Law, A. R., 6C23
Lawless, W. N., 1J90
Lawrence, A. J., 5F31
Lawrence, J. F., 4G32, 5F45
Lawrence, J. G., 3C12
Laws, D. R. J., 1F18
Lawson, A. M., 2D2
Laycock, T., 4A2*C*
Lazar, C., 6B224
Lazarev, A. I., 5B176
Lazareva, M. A., 1C73
Lazareva, V. I., 5B176
Lea, D. J., 2J20
Leaback, D. H., 1D108*B*, 6A2*C*
Leaman, D. H., jun., 3D101
Leary, J. J., 6C1
Least, C. J., jun., 3D35
Lebedev, I. A., 6B108
Lebedev, V. I., 5B190
Lebedeva, N. V., 4B74
Lebedeva, S. P., 4B136, 6B191
Lebedinskaya, M. P., 6H28
Lebel, M., 6D51
Lebiedzik, J., 1J105
Leblanc, J. L., 1C79
Leblond, J., 2J52
Lech, J. F., 2A1*C*
Lechner, E., 4F22
Lechnir, R., 5A1*C*
Leclercq, M., 4C38
Leco Corp., 3J1*P*
Lecocq, R., 5A6*C*
L'Ecuyer, J. L., 5B154
Le Demezet, M., 1J76
Lederer, M., 6B30
Ledrappier, N., 4F32

ee, A. P., 4B120
ee, B. H., 5D25
ee, C. R., 2D64
ee, C. W. Q., 2F30
ee, F. H., 2D45
ee, K. D., 1A1*C*, 2A7*C*
ee, K.-T., 1D90, 2A14, 2D146, 5D94, 6D34
ee, L. S., 1F8
ee, M.-L., 2A4*C*
ee, N. E., 5A2*C*
ee, R.-J., 6H30
ee, S. L., 1H3
ee, W. R., 1J85
ee, Y. B., 5F26
ee, Y. C., 5F44
ee, Yong Keun, 1B51
ee, Y. W., 4G32
eenheer, J. A., 3H47
ees, R., 4F39*B*
efebvre, G., 4C41
eferink, J. G., 6D26
efevre, H., 6B141
efevre, J.-P., 1E31
effler, J., 5A5*C*
efol, N., 6B20
efort, D., 4C41
egallais, V., 1J32
egat, T., 3F8
ege, G., 4C9, 4C10
eggett, D. J., 5B16
egradi, L., 4C37, 4C39
ehmann, P., 1D58
ehnert, G., 5A3*C*
ehr, R. E., 1E33
ehuede, J. M., 3F32, 5F48, 5F49
eibrand, R. J., 6J26
eifertova, I., 1E11, 3D59
eigh, T., 4A20
eijnse, B., 1D39
eimbacher, W., 6A1*C*
eipunskaya, D. I., 6B229
eistner, L., 5G21
eisztner, L., 5A6*C*
ekanov, L. P., 6B78
elikova, V. E., 5C26
emberkovics, E., 5E21
emm, A. W., 3F40
emmon, D. H., 2A1*C*
e Nagard, M., 6B141
eo, B., 1E35
eone, A. M., 4F37
eoni, L., 6C8
eonov, V. A., 6B47
eont'ev, G. G., 6B21
epeshkov, I. N., 5A6*C*
epri, L., 1C35, 2C34
eroux, M., 5B154
eRoy, A., 5A5*C*
ertratanangkoon, K., 5A2*C*, 6A1*C*
eschonski, K., 1J92, 5J115
eshchev, V. P., 5C35
eskinen, E. E. A., 4A1*C*
eskiw, M. J., 1D14
esny, J., 2H2
esz, K., 1B162
eterrier, F., 2D125
eung, A. T., 2A1*C*
eung, S., 1D50
eute, R. K., 5A2*C*
evadie, B., 4C90
evene, W. J., 1B90, 5B37
eventhal, L., 2A7*C*
Levi, S., 1B90, 5B37
Levin, G. V., 5H45
Levin, I. S , 1B35, 2B103, 3B45, 5B58, 5B123, 6B29, 6B67
Levin, J., 5B209
Levine, J., 4E16
Levitman, Kh. Ya., 4B76
Levitt, T., 3D32
Levy, D. A., 1D105
Levy, G. C., 2A1*C*
Levy, P. F., 5A6*C*
Levy, R. L., 2A1*C*
Lewand, D., 3D28
Lewandowski, A., 4G30
Lewartowska, A., 3J10
Lewin, L. M., 5D61
Lewis, I. C., 5A1*C*, 6H21
Lewis, J. W., 5A2*C*
Le Xuan Phan, 3E35
Leyden, D. E., 3B15, 3H27
L'Her, M., 1J76
Lhoest, G., 5D41
Li, K. L., 1C77
Liao, T.-H., 5D100
Libby, L. M., 2G36
Libertella, R., 1C29
Liberti, A., 1H13, 2A6*C*, 2H45, 4C62
Licata, A., 3A1*C*
Licci, F., 2B137, 6B206
Lichte, F., 5A5*C*
Lichtenberg, J. J., 2A4*C*
Liddle, J. A., 6D38
Lide, T. V., 3B115
Lieb, D., 2F12, 2F14
Lieberman, A., 1J100
Lieberman, M. L., 6C13
Liebich, H. M., 6A1*C*, 5A2*C*
Liebl, H., 4J41
Liebman, S. A., 2A1*C*, 3H12
Lievens, P., 6D5
Liiv, R., 6H14
Lillian, D., 1H8
Lim, R., 1J69
Lim, S., 4F15
Lima, M. L. G. P., 5G5
Lin, D. C. K., 4D21
Lin, J.-K., 3D94
Lin, J. W., 5B25
Lin, S.-N., 6A1*C*
Lin, T. S., 5B73
Lin, Y., 4A3*C*
Lindahl, P. C., 5F5
Lindberg, C., 6D22
Lindberg, I., 4F19
Lindberg, S. E., 5A5*C*
Lindner, L., 4B105
Lindner, W., 1E30, 4C24, 4E32
Lindquist, J., 1E21, 6E15
Lindqvist, B., 4F19
Lindstrem, I. S., 6B137
Lindstroem, B., 6D32, 6D50
Ling, C. S., 2A1*C*, 6B16
Lingjaerde, P., 4A1*C*
Linhares, P., 2B77
Linhart, K., 4C70
Linhart, P., 6B84
Liong Sian Oey, 5C60
Lipanova, M. D., 3B165
Lipavskii, V. N., 4J26
Lipinski, B., 4E12
Lippmaa, H., 4C83
Liptay, G., 2J159
Liquori, E. M., 1D14
Lira-Olivares, J., 5J83
Lisboa, B. P., 3E24
Lisitsyn, A. P., 2H17
Liskowitz, J. W., 5A4*C*
Lisnyanskaya, M. G., 5B212
Lister, D. B., 3A1*C*
Liszka, M., 1C70
Liteanu, C., 2C60, 3J82, 4B1, 5B14, 5B23
Literathy, P., 5A6*C*
Little, J. N., 2A1*C*, 6A1*C*
Litvinova, B. Sh., 6B67
Litwiller, R. D., 1D53, 2D82
Liu, C.-Y., 6A8
Lizogub, V. A., 5B65
Ljubicic, Z., 1J1
Llenado, R. A., 6C72
Llorente Gomez, E., 1B125
Lloyd, J. B. F., 3C59
Lloyd, P. J., 6J78
Lloyd, P. J. D., 1J108
Lo, F.-C., 2D53
Lo, J. M., 4H19
Lobanov, E. M., 4B22
Lobanov, F. I., 6B47, 6B198
Lobova, T. N., 4B131
Lochmueller, C. H., 1C47, 5D65
Locke, D. C., 4J11
Locock, R. A., 4E43
Loekke, H., 2G20
Loew, D., 2D33
Loewenstein, E. V., 1J51
Lognenko, E. M., 6B144
Loheac, J., 5D40
Lokshtanov, V. Z., 6B210
Lom, T., 4A3*C*
Lomakina, L. N., 1B168
Lomakina, T. P., 6B192
Lombardo, P., 2D51, 2D52
Lomekhov, A. S., 6B39
Lomovtseva, T. I., 5C44
London, A., 5J111
Longchambon-Faivre, B., 1D64
Longman, G. F., 3C60
Longo, A., 2A6*C*
Longo, Antonio, 2B23, 2B136
Longo, N. S., 6A1*C*
Loose, W., 4B142
Loos-Neskovic, C., 3B127
Lopatenko, S. K., 1C54
Lopatina, V. S., 6C38
Lopes-Virella, L., 2D129
Lopez de Hierro, A. G.-G., 4A18
Lopez Fernandez, J. M., 4B166
Lopez Pascual, V., 6J3
Lopez-Sanchez, G., 4E41
Lorber, K., 6B64
Lord, D. A., 2A4*C*
Lorentsen, O., 4A1*C*
Lorenz, D., 6H54
Lorenzen, J., 2B143, 3B101, 3B150
Loriya, N. V., 6H32
Loseke, W. A., 2A7*C*
Losev, N. F., 3J56
Loseva, G. I., 3E22
Loshchilova, V. D., 6A1*C*
Lough, A. K., 5D48
Loughin, S., 1J48
Lousberg, R. J. J. C., 1E9
Lovelady, H. G., 1D25
Lovelock, J. E., 6A1*C*
Lovett, R. J., 5J52
Lovins, R. E., 1D81

Lowenstein, J. M., 4D38
Lowry, R. R., 3J30
Lowry, S. R., 2J103, 6A20, 6J61
Lozano, C. M., 4B14, 4B133
Lozeva, S. M., 2E45
Lubaszka, E., 2B7
Luca, C., 5J94
Lucena-Conde, F., 5D69
Lucien International, 3D119*P*
Luczak, J., 3H24
Ludwicki, H., 4E12
Ludwig, F. A., 2B111
Lueb, R. A., 1H2
Luebbers, D. W., 4J51
Lugovoi, S. V., 1B149
Lugowska, E., 1E18
Lugowska, M., 4B89
Luiga, P., 6H14
Luis, P., 6J2
Lukas, J., 6J22
Lukashevich, O. V., 5H38
Lukashin, V. N., 2H17
Lukasiewicz, R. J., 2C52, 3C56
Luke, M. A., 4G28
Lukovskaya, N. M., 2B151, 5E4, 6B154
Lukoyanova, L. V., 1J20
Luk'yanenko, V. A., 5B65
Luk'yanova, A. I., 3B65
Luna, Kh. M. R., 6B125
Lund, D. M., 2A7*C*
Lund, W., 5J99
Lunde, G., 5G17
Lundin, A., 1D87
Lundin, R., 2D111
Lundstroem, K., 6E15
Lungu, V., 3E45
Luong, L., 5B11
Lupovich, P., 1D13
Lupu, A., 2H44
Lur'e, Yu. Yu., 4H36
Lurio, A., 6J41
Luskina, B. M., 3C90, 6C90
Lust, W. D., 4D36
Luten, J. B., 2J147, 5A5*C*
Luther, G. W., III, 6H49
Luthman, J., 6D8
Luttrell, G. H., 3B15
Lux, F., 5A5*C*
Luzzana, M., 2J22
L'vov, B. V., 3J59, 5J51
L'vovich, L. M., 1C40, 6C54
Lyalikov, Yu. S., 2B135
Lyande, Yu. V., 5C49
Lyapin, S. B., 1B134
Lyapunova, N. Kh., 5B39
Lykourghiotis, A., 3J35
Lyle, S. J., 6B88
Lynch, D. F., 6C1
Lynch, P. F., 2A1*C*, 3C52
Lynch, T. J., 2D158
Lynn, S., 2J35
Lyon, T. R., 2A1*C*
Lypka, G. N., 4B27
Lystsova, G. G., 1B146
Lythal, G., 6D48
Lyubimov, V. F., 2B62
Lyungrin, D. D., 6B152
Lyutikova, N. N., 5H44

Ma, T. S., 6C10, 6E2
McAlpin, D. L., 6B135
Macarulla, J. M., 3D76
MacAskill, S., 4C90
Macaulay, I. D., 2A4*C*
McBride, B. C., 4D78
McBryde, W. A. E., 5B16
McCain, H. W., 5G23
McCall, E. R., 2A1*C*
McCallum, C., 3A8
McClellan, B. E., 3G1
McCloskey, D. H., 3J36
McCluer, R. H., 1D51
McClure, W. O., 5D43
McConnell, M. L., 6A1*C*
McCormick, A., 2A1*C*
McCorriston, L. L., 2C53
McCrackin, F. L., 1J89
McCready, R. M., 2F50
McCullough, J. G., 2A16
McCullough, P. R., 3J32
McDaniel, C. A., 3G28
McDonald, C. W., 5B73
McDonald, D. B., 6C52
MacDonald, D. G., 5H41
McDonald, F. R., 2A1*C*
MacDonald, N. C., 2A1*C*
MacDonald, N. S., 1A1*C*
McDonnell, J. P., 2F40, 4E39, 4G15
McDonough, L. M., 2G38
McDowell, A. E., 5A2*C*
Macek, K., 2D102
McElhaney, R. J., 2A7*C*, 5A5*C*
McEwen, C. N., 5J76
Macfarlane, J. M., 5J71
McGeachin, H. McD., 2J70
MacGee, J., 3D64
McGinley, J. R., 5A5*C*
McGinnis, E. L., 5A1*C*
McGlothlin, C. D., 1D38, 2A1*C*, 3D122
McGonigle, E. J., 2A1*C*
McGraw, L. D., 6C67
McGuinness, J. D., 1F18
McGuire, J. M., 5A3*C*, 6H41
Machado, I. J., 5B86
Macharashvili, G. R., 5G1
Machida, M., 2D128
Machida, M. I., 2D128
Macholan, L., 5J97
Maciejewicz, W., 1C50
Maciejowski, F., 5C58
McIntosh, C., 2D24
MacIntyre, I., 3D91
McIntyre, N. S., 6B212
McIsaac, L. D., 2A7*C*
McKamey, M. R., 4C66
Mackay, D., 2A4*C*
McKay, D. P., 4B5
McKenzie, L. R., 4H24
MacKenzie, S. L., 4D55
McKinly, M. R., 4F18
McKinney, J. D., 2F22
McKinney, J. T., 2A1*C*
McKinstry, H. A., 1J106
McKlveen, J. W., 2J146
McLafferty, F. W., 3J15
McLaren, A. C., 4J44
McLaren, J. V., 3J22
McLauchlan, E. J., 6B204
McLaughlin, J. L., 3E12
McLaughlin, P., 1D93
McLaughlin, R. D., 3H1
MacLeod, A. J., 5F1
McLeod, H. A., 2A4*C*, 3G30
Macleod, I. D. G., 5J9
McMahon, R. E., 4D24
McMartin, K. B., 3D63
McMenamy, R. H., 2D17
MacMurdo, K. W., 2J152
McNay, J. L., 6D17
McNeil, D. P. D., 3B112
MacNeil, J. D., 3G32
McNelles, L. A., 3D7
McNesby, J. R., 5A3*C*
MacPherson, D. R., 4B69
McQuaker, N. R., 3G10, 3H34
McQuinn, R. L., 2D27
McReynolds, J. H., 5H17
McSharry, W., 4G7
Madden, S. C., 6G9
Madej, A., 6A11
Madelaine, G., 1J96
Madere, R., 5F70
Maeck, W. J., 2A7*C*
Maeda, M., 6E25
Maehly, A. C., 2E50
Maelicke, A., 1E48
Maenhaut, W., 5B124
Maes, R. A. A., 5C8, 6D26
Maghssoudi, R. H., 3B38
Maghzian, R., 6B88
Magill, J., 5A6*C*
Magnusson, G., 2J39
Mahadevappa, D. S., 4D57, 5C32, 6A9
Mahaffey, E. J., 5B178
Mahajan, S. N., 4E34
Mahan, A., 5B20
Mahanti, H. S., 1B104
Mahenc, J., 5D45
Mahgoub, A. E., 6B130
Mahmoud, M. R., 1B23, 2B90, 5B132
Mahmoud, R. M., 3B46
Mahon, J. D., 1D44
Mahood, H. W., 2H46
Mahuzier, G., 6D21
Mai, P. T. H., 4D11
Maibach, R. A., 6A1*C*
Maiboroda, I. K., 1B146
Maican, A., 3C20
Maidatsenko, G. G., 5J30
Maigne, J. P., 1J96
Maines, I. S., 1H33, 2J89
Mainguy, P. R., 4G13, 5F72
Maini, P., 5G31
Mainwaring-Burton, R. W., 6D56
Maiorov, I. A., 1B49, 2B31
Maire, G., 6C6
Mairesse-Ducarmois, C. A., 1E49, 5E29, 6C30
Maj, M., 4B88
Maji, K. D., 5B18
Majkic, N., 5D93
Major, W. J., 1A1*C*, 2A7*C*
Majumdar, D., 3B5, 6B2
Majumdar, S. K., 2B152, 3B166
Makar, A. B., 3D63
Makarenko, V. G., 6C36
Makarov, D. F., 5J42
Makarova, L. L., 6A13
Makarova, S. F., 6B232
Makarova, S. V., 3G43
Makarov-Zemlyanskii, Ya. Ya., 6B173
Makart, H., 6C86
Makartseva, V. N., 5B78
Makhnev, Yu. A., 1B11
Maki, Y., 6B187
Makita, M., 6D54

ıklakova, A. V., 5C9
ıklakova, V. P., 4H32
ıkogon, A. M., 3C14
ıkohon, P. A., 2J127
ıkov, N. N., 6B161
ıksimov, G. A., 5B8
ıksimovic, R., 5C38
ıkulov, N. A., 6C91
ılangeau, P., 6C100*B*
ılanik, V., 3B77
ılat, M., 3B77, 3B162
ılaterre, M., 5D40
ılathi, M., 6B174
ılek, J., 2C44
ılen, E., 4E45
ılhotra, R. K., 6E36
ılhotra, S. K., 5B86
ılik, O. P., 5B40
ılik, S. R., 3B26
ılik, W. U., 1B117, 3B145, 4B9
ılinina, R. D., 6B213
ılinow, M. R., 1D93
ılissa, H., 4H1
ıllen, D. N. B., 6E30
ıllet, V. N., 3F23
ıllett, R. C., 5B142
ıllett, W. R., 4C54
ıllik, K. L., 6C16
ılm, S., 6B200
ılmquist, K., 5A5*C*
ılmstadt, H. V., 6J50
ılmwig, H., 3J87
ıloy, J. T., 6J9
ıl'tsev, V. F., 3B160
ılusecka, M., 1B56, 4B46
ıly, J., 2H33, 2H41, 3H33
ılyukov, B. A., 5B119
ımantov, G., 1J42
ımedov, I. A., 4B149
ımedov, R. G., 5C16
ımer, O. A., 2D73
ımiya, M., 4J48
ınahan, S. E., 3A6, 3C29
ınasterski, A., 2D78
ıncha, M., 5D53
ıncheva, I., 5D72
ındal, S. K., 3B2
ındal, Sanat Kumar, 5B205
ındel, L. R., 6D57
ındrou, B., 5F58
ıngelsdorf, P. C., jun., 3A12
ıngelson, N. F., 3H10, 5A5*C*
ıngia, A., 1H9
ıngold, H. K., 4J18
ınhart, K., 3C22
ınkad, B. N., 1B170
ınley, C. H., 5F59
ınn, J. B., 4G29
ınn, R., 2J75
ınners, M. J., 5D102
ınning, D. C., 6J54
ınnkopff, R., 2J130*B*
ınova, T. G., 5B85
ınsell, R. L., 2D131
ıntel, M., 2B88, 3B79
ınura, J. J., 2C85
ırai, L., 3D73
ırcantonatos, M., 6B165
ırceau, N., 4J17
ırchenko, A. P., 6B220
ırchi, S., 3D99
ırcinkowska, K., 2E31, 5E10
ırczenko, Z., 1B40, 1B48, 4B175*B*, 5B147
Mardente, S., 2E38, 6E29
Marek, B., 2F41
Marek, S., 1B95
Mareva, S., 1B150
Margalet, A., 1E45
Margoshes, M., 2A1*C*
Margosis, M., 1E16
Marhoefer, J., 6A1*C*
Maric, L., 4C42, 5C24
Marich, K. W., 2J71, 5A2*C*
Marik-Korda, P., 5A6*C*
Marinov, M., 4D2
Mark, W., 2B138
Markelov, V. F., 4J26
Markey, S. P., 3D62
Markhabaev, I. A., 1B66, 6B82
Markianos, E. S., 2D148
Markiw, R. T., 2D101
Markl, P., 2B2
Markov, B. A., 3C28, 6C37
Markov, V. K., 3B20, 5B156
Markov, V. L., 1B14
Markova, E. A., 5B75
Markova, L. V., 1B154
Markova, M., 2C56
Marks, G. E., 5J33
Markwardt, U., 6A1*C*
Marmion, D. M., 2F37
Marquard, J., 1J29
Marquardt, I., 1D99
Marqversen, J., 4A1*C*
Marsalek, J., 2A4*C*
Marsel, J., 4C1
Marshall, D. C., 2J125
Marshall, F. J., 4D24
Marshall, R., 6D69
Marshall, R. T., 2F17
Marston, A. L., 4H37
Marti, E., 5A6*C*
Marti, S., 4C78
Martin, A. J. P., 6A2*C*
Martin, D. L., 1J88
Martin, E. R., 1A1*C*
Martin, F., 2A3*C*, 6D50
Martin, G. E., 5F39
Martin, H. R., 5B111
Martin, J. J., 2J79
Martin, J. V., 4D72
Martin, M., 1J8, 3J13, 6A1*C*
Martinchek, G. A., 1J58
Martinez Lozano, C., 4B14, 4B133
Martinez-Vidal, J. L., 6B79, 6B179
Martirosov, A. E., 1B46, 1B61, 1B96
Martucci, J. D., 2E35
Martynenko, L. I., 5B90
Martynova, E. G., 5B194
Maru, P. C., 4B116
Marunina, N. I., 4B34, 4B65
Maruta, T., 2B98
Maruyama, K., 4C58
Marzec, M., 3E49
Masa, A. I., 3J82
Masada, M., 4D16
Masek, V., 4H17
Maseles, F. C., 2A1*C*
Mashireva, L. G., 5C41
Mashkevich, A. I., 5H43
Masi, S., 5A6*C*
Masic, D., 5F28
Mas'ko, L. I., 3B165
Maslov, O. D., 4A19
Maslova, G. B., 6B58
Masood, I., 5A6*C*
Masoudi, F. N., 5B207
Massart, D. L., 6C33, 6J15, 6J24
Massee, T. W., 1G9
Masserano, R., 3E25
Masson, J. D., 5C27
Masson, J.-P., 4B16, 4C33
Masson, M. M., 5J87
Massoumi, A., 3B76
Mastinu, G. G., 2H25
Masuda, H., 3F38
Masui, N., 4B40
Masumoto, H. T., 4G28
Matheson, L., 2A2*C*
Mathews, R. G., 6A1*C*
Mathias, A., 1H18
Mathot, F., 5C14
Mathur, K. N., 3B95
Mathur, S. P., 4B25
Matlack, G. M., 2A7*C*, 2B70
Matlin, S. A., 3E15
Matson, W. L., 1J106
Matsubara, C., 2B42
Matsubara, H., 5D76
Matsubara, I., 2D31
Matsuda, T., 4B75
Matsui, F. F., 3E30, 4E33
Matsui, M., 1H35
Matsumoto, I., 1B94, 3C67
Matsumoto, Ken, 4B111
Matsumoto, Kojiro, 1D100
Matsumoto, R., 1B147, 3B155
Matsumoto, T., 2D81
Matsumura, F., 5G32
Matsumura, T., 3B151
Matsunaga, K., 4H21
Matsuo, T., 6B172, 6B188
Matsuoka, K., 6E25
Matsusaki, K., 3B61
Matsushima, H., 1H40, 3H39
Matthews, E. W., 3D91
Matthews, P. J., 3H19
Mattox, V. R., 1D53, 2D82
Mattson, W. A., 1J60
Mattsson, P. E., 3H48, 6J19
Matusevich, L. A., 2B1
Matusiewicz, H., 4B23
Matveev, O. G., 4H30
Matyashov, V. G., 5B87
Mauch, A., 3D31
Maume, B. F., 6A1*C*
Mauss, H., 1C11
Mavrodineanu, R., 2J54, 6J68*B*
Maxson, D., 2J47
Maxwell, D. C., 2A1*C*
May, S., 6B20
May, W. E., 2H42, 6H51
Maybury, R. B., 4G32
Mayer, A., 1E29
Mayer, J. W., 2A1*C*
Mayfield, R. J., 3D53
Mayhan, K. G., 2C78
Mayor, G. H., 2A4*C*
Mays, D. L., 6E12
Mazeika, T. R., 2E19
Mazumdar, M., 1D16
Mazumdar, N. B., 3B139
Mazurkiewicz, B., 2C13
Meaburn, J., 5J40
Meagher, R. B., 2D114
Mecham, H. D., 2J85
Mechenov, G. A., 4J40
Meckbach, W., 2J75
Medeleanu, V., 2H9

Medina-Acevedo, J. C., 4E41
Medina Perdomo, M. F., 6B125
Medved, M., 4C1
Medved', T. Ya., 1B79
Medyantseva, E. P., 6B111
Meeles, M. T. H. A., 1E34
Megargle, R. G., 3B107
Megges, R., 2E12
Megroyan, R. A., 5C7, 6C3
Meguro, H., 2J121
Mehlich, A., 1G4
Mehr, A., 5E1
Mehra, H. C., 1B19, 1B115, 1B159
Mehra, M. C., 2B34
Meider-Gorican, H., 2B37
Meier, A., 5J46
Meier, H., 1B167, 1H25, 2B4
Meier, S., 2A6*C*
Meier, W., 2C2
Meijsen, B. T., 3D48
Meilgaard, M. C., 4A3*C*
Meinen, V. J., 2G37
Meisel, T., 5A6*C*
Meissner, K., 2D15
Meites, L., 2A16
Mekhtiev, S. I., 5C16
Mekler, L. I., 6B225
Melander, A., 4A1*C*
Mel'chekova, Z. E., 2B115
Melchert, H.-U., 5F64
Melchior, J., 2D153
Melchior, W., 6J45
Melgunov, V. I., 2D141
Melhuish, W. H., 4J52
Melia, J., 1H5
Melicharova, E., 3D59
Melikov, A. A., 5B96
Mellett, L. B., 3J26
Mello, V. N. A., 1B175
Mellor, N., 1H18
Mel'nikov, V. A., 6B21
Melo, F., 6D52
Melo, O. T., 1J97
Melson, G. A., 2B163*B*
Melykuti, C., 5A6*C*
Mencik, Z., 2J64
Mende, G., 3C87
Mendenhall, C. L., 3D64
Mendez, J. H., 5D69
Menge, P., 1B167, 1H25, 2B4
Menis, O., 2A1*C*, 5A6*C*
Menon, K. R., 3B27
Menon, P. K., 3F21
Mentasti, E., 3B135, 5B180
Meny, L., 4J38
Meranger, J.-C., 5F43
Merat, E., 6F25
Mercer, J. F. B., 5D82
Mercier, J. G., 5A6*C*
Mercier, M., 5D41
Merciny, E., 3J86
Meresz, O., 5H36
Merisov, Yu. I., 1B64, 5B103
Merkle, E. J., 2B107
Merkulov, A. V., 3B147
Merkus, F. W. H. M., 2D41
Merlin, L., 3B140
Merryfield, R., 3C42, 6C64
Mertens, J., 6C33
Mertsalov, S. L., 3B54
Meruelo, D., 2D162
Merz, G., 5B195
Mesh, L. Ya., 6C54
Meshkova, N. M., 2B103, 3B45
Meshkova, O. V., 6H53
Mesman, B. B., 3H29
Mesnard, P., 4E9
Mesquita, K. G. B. de, 4B105
Mestres, R., 1G15
Meszaros, L., 6C51
Metcalf, S. G., 5J41
Metras, F., 3C31
Metting, H. J., 6A15
Metzger, G., 6B141
Meuzelaar, H. L. C., 4J28
Meyer, J. L., 2D21
Meyerson, A. L., 6H49
Mezentseva, V. F., 1B164, 4B55
Mezhevich, A. N., 6B35
Mezhlumyan, P. G., 3B96, 6B163
Mibe, K., 6E35
Miceli, J. N., 2D43
Michael, G., 1C19
Michael, L. W., 5D105
Michal, J., 5C54
Michels, J. G., 3C32
Michini, L. J., 4D64
Middleditch, B. S., 2D108
Midgley, D., 1H32, 3A8
Mielenz, K. D., 2J54
Migliore, A. J., 5J119
Miguel, A. H., 3H4
Mihalka, S., 6B45
Mikami, E., 2D23
Mikhailichenko, L. I., 3B20, 5B156
Mikhailov, P. M., 6B39
Mikhailov, V. A., 6B42
Mikhailova, L. S., 5H43
Mikhailova, Z. S., 4B36
Mikhel'son, P. B., 2B147, 5B51
Mikita, K., 5E21
Miklosi, S., 6D48
Mikoshiba, K., 2E52
Mikutskii, V. G., 2J144
Milaev, S. M., 2B97
Milano, M. J., 2A1*C*, 2A7*C*, 4C22, 5A2*C*
Milanovich, F. P., 2J78
Mile, L., 5F38
Milina, R., 1C72
Millard, B. J., 4E35
Millard, H. T., 6A3*C*
Miller, A. D., 5B45
Miller, D. A., 5A5*C*
Miller, E. T., 4B174
Miller, G. E., 5A5*C*
Miller, G. R., jun., 2H37
Miller, J. N., 2D126, 3E37
Miller, M., 4F8
Miller, O. N., 2D98
Miller, R. E., 4G14
Miller, R. G., 5D15
Miller, V. L., 4G26
Milliman, G. E., 3C44
Millington, D. S., 2A3*C*, 4D47
Millow, S., 3C89
Mills, S. A., 5A7*C*
Milne, G. W. A., 2A1*C*
Milyaeva, N. M., 1B32, 4B94
Minakami, M., 2H14
Minczewski, J., 1B59, 4D11, 6B77
Mine Safety Appliances Co., 3J70*P*
Minett, W., 3G42
Mingay, D. W., 5B116
Mingulina, E. I., 1B114
Minh Duc, T., 6J44
Minin, A. A., 1B92, 4B151
Minkkinen, P., 5B64
Mintz, G., 1D103
Minzl, E., 4B24
Mirak'yan, V. M., 4B126
Mirenskaya, I. I., 6B92
Mirer, F. E., 2D54
Mirkind, L. A., 6C88
Mironov, D. P., 1C9
Mironova, T. P., 2B113
Mironova, V. N., 1C9
Miroshnikov, V. S., 6B21
Mirza, J. A., 6B202
Misakov, P. Ya., 6B25
Mishakova, T. I., 6C57
Mishchenko, V. T., 1B67
Mishima, M., 4D14
Mishra, R. K., 1B160
Misra, A. K., 1G1
Missala, I., 6G10
Mitchell, D. G., 1B15, 1H33, 2A1*C*, 2H18, 3J60, 6D10
Mitchell, J., jun., 2A1*C*
Mitchell, J. W., 2B57
Mitina, L. I., 6C39
Mitropolitska, E. V., 5E4, 6B154
Mitsuda, H., 3D117
Mitsugashira, T., 3B17
Mitsui, T., 3E11, 4E26
Mitta, A. E. A., 6E39
Miwa, Y., 1B17
Miyabo, S., 3D84
Miyachi, Y., 3G38
Miyajima, T., 4B90
Miyazaki, A., 4H39
Miyazaki, H., 2D46, 6D47
Miyazaki, M., 4H12
Mizoguchi, T., 1B111
Mizote, A., 6F9
Mizuike, A., 1B36, 3B62
Mizuno, T., 6J13
Mizutani, A., 3D102
Mizutani, N., 2J161
Mizutani, T., 3D102
Mkhitaryan, L. F., 6B164
Mkrtchyan, M. A., 5F9
Mlodecka, J., 4C34
Moawad, A., 2D70
Moberg, U., 2D111
Mocak, J., 1B127
Mochalov, K. N., 5J44
Mock, D. M., 5J53
Moeller, I., 4D34
Moenke, H., 1J37
Moenke-Blankenburg, L., 1J37
Moest, R. R., 2B25
Moffat, A. C., 3E2, 3E4, 4A5*C*
Moghissi, A. A., 1A1*C*
Mohamed, Y. A., 2D91
Mohan, N. R. C., 3E31
Mohnke, M., 2J30
Mohr, J., 1J37
Mojski, M., 1B40
Mokeev, V. Ya., 6J21
Molander, M., 6D32
Molch, D., 4B152, 4B156
Moll, M., 3F32, 5F48, 5F49
Mollenauer, L. F., 1J50
Molnar, F., 5A6*C*
Molodetskaya, N. E., 4B17
Molodynska, W., 6B238
Molot, L. A., 1B54, 2C27
Molyneux, R. J., 5F51
Momose, A., 2D38
Mon, K. K., 1J52

ondal, A., 5F46
onder, C., 4D51
onkman, J. L., 5A3*C*, 6A1*C*
onleaud-Dupy, J., 3E10
onteoliva, M., 1D43
ontgomery, D. S., 2A4*C*
ontgomery, M. R., 5A2*C*
ontoya, E., 2A1*C*
ody, G. J., 3D118, 5J90, 5J92
okherjea, S., 3B143
oney, J. R., 2A1*C*
ore, C. E., 5J33
ore, F. L., 5B72
ore, F. P., 3C54
ore, M., 2B33
ore, W. E., 6C83
orhead, E. D., 2D11, 6B74
os, W., 2A7*C*
rachevskaya, M. D., 5C3
rano, J. R., 2F11
rard, P., 5D67
ravek, J., 4J9
rawietz, G., 6J69
rell, P., 4D62
reton, J., 5H1
rgan, J. W. W., 3C70
rgan, N. L., 4F10
rgan, S. L., 5J48, 6A1*C*
rgen, E. A., 6B178
rgenthaler, L. P., 3B13, 3J61, 5H22
ri, F., 1D52
ri, I., 2B12
ri, S., 3B39
riarty, R., 1D13
rimoto, M., 5J95
risige, K., 1B62
rita, H., 3D23
rita, S., 4D41
rooka, R., 3B151
ros, S. A., 2E25
rozova, G. I., 5B19
rozowich, W., 2D68
rris, A., 5J67
rris, J. S., 3D5, 5A5*C*
rris, M. D., 2A1*C*
rrison, G. H., 2J114, 5J82, 6B41
rrison, I. M., 1C24
rrison, J., 6D28
rrow, R. W., 2A7*C*
rse, E. E., 4D64
rselli, P. L., 5D24
rshina, T. N., 5H32
rtu, I., 3H11
rvay, J., 2E51
sbach, E. H., 4D45
seman, R. F., 4D31
sescu, N., 1C55, 2C58
shkovskaya, L. T., 2B147
sier, B., 1B128
skalyk, R. E., 4E43
skovskikh, L. A., 2B13
skvin, L. N., 2J17, 2J18, 3B84, 6B21
ss, C. W., 6A1*C*
ss, D. W., 4D76
ss, W. D., 3B86
ssman, T. G., 5J16
ssotti, V. G., 2A1*C*
stecky, J., 6C63
sulishvili, L. M., 3D6, 5G1
tomizu, S., 4B139
trii, N. I., 6B201
ttola, H. A., 1B131
Moulut, O., 1C81
Mourille, M., 6C93
Moye, H. A., 1G20, 3G31, 3G36
Moyers, J. L., 4J30
Mozzhukhin, A. V., 2J17, 2J18
Mrochek, J. E., 5A2*C*
Much, H., 3C76
Mueller, C., 1E50
Mueller, F. O., 1D32
Mueller, G., 3D46, 5D36
Mueller, H., 1B169, 3B56
Mueller, K., 5A5*C*
Mueller, Kurt, 1B124, 6B64
Mueller, M., 3D28
Mueller, T. K. B., 1J15
Mueller-Mulot, W., 4G13
Mueller-Plathe, O., 5D5
Muenzing-Vasirian, K., 3E16
Muir, S. M., 3B18
Mujtaba, S. Q., 3B106, 4J13
Muk, A., 5C39
Mukai, T., 4H43
Mukhamedzhanova, D., 5B10
Mukhedkar, A. J., 2B43
Mukherjee, A. K., 1G21, 3F24
Mukherjee, G., 1G21, 3F24
Mukherjee, H. G., 3B5, 6B2
Mukherjee, K. D., 4J18
Mukherji, A. K., 2A15
Mukhin, O. S., 4B149
Mule, S. J., 3D49
Mulik, J., 3H13, 5A1*C*
Mulvihill, M. J., 3C92, 6C99
Muminov, N. P., 1B66, 6B82
Mundy, V., 1F9
Munier, R. L., 1D64, 3D93
Munnelly, K. P., 1J110
Munns, T. W., 4D66
Munshi, K. N., 3B102, 6B10, 6B138
Munson, J. W., 2C18
Munteanu, I., 2C49
Murad, E., 5B67
Muraki, H., 3F38
Muramoto, K., 6D61
Murashima, R., 2D49
Murashova, O. P., 4C94
Murata, K., 4J14
Murata, M., 2B45
Murawski, U., 5D47
Murozumi, M., 1H27
Murphy, B. E. P., 2A3*C*
Murphy, J. C., 5J70
Murphy, J. S., 2B164*B*
Murphy, P. J., 6A7
Murphy, S. D., 2D54
Murphy, W. F., 4J56
Murray, D. A. J., 2A4*C*, 6H44
Murthy, T. K. S., 5B138
Murti, M. V. R., 4B60
Murti, R., 2B122
Murty, K. R., 1A5
Musha, S., 1H24, 3H18, 4H20, 6B75, 6J10
Mushak, P., 5H29, 5H30
Mushkin, Yu. I., 6C35
Mushran, S. P., 2B122
Mushtakova, S. P., 5B150
Mussalska, A., 6E42
Musselman, R. L., 5J60
Mustafina, A. S., 3C6
Muthu, M., 5G38, 6H24
Muzzarelli, R. A. A., 3D9
Myagchenkov, V. A., 3C81
Myasnikova, V. M., 6B35
Myasoedov, B. F., 1B78, 1B79, 6B94, 6B106, 6B108
Myers, G., 1B1
Myers, M. E., jun., 6C61
Myerson, A. L., 6H7
Myher, J. J., 3D73, 4F35

Nabivach, V. M., 2C46
Nack, B., 2D150
Nadezhina, L. S., 5B212
Nadkarni, R. A., 6B41
Naeem, M., 1B74
Naeslund, B., 4D23
Naestoft, J., 2D35
Nafchi, N. E., 1D60
Nag, N. K., 1D16
Nag, S. P., 3B5
Nagai, H., 4B56
Nagai, I., 6F23
Nagai, T., 4B75
Nagarkar, S. G., 3B125
Nagasawa, K., 2F39, 3F15, 6F24
Nagase, M., 6B120
Nagdaev, V. K., 5B181
Nagi, F. I., 1B73, 1B74, 2B134
Nagorski, B., 4B128
Nagy, G., 2H39
Nagy, K., 1A1*C*
Nagy, L., 1E17
Nagy, S., 4B47
Nagy, Z., 1J6
Naidu, H. M. K., 5C32
Naidu, R. R., 2B41
Naik, D. V., 6E34
Nair, P. G., 4G35
Najak, A., 3H45
Najam, M. R., 6B202
Nakagawa, G., 4B127, 6B109, 6B112
Nakagawa, K., 1C42
Nakagawa, R., 5J95
Nakagawa, T., 4D16
Nakahara, T., 6B75
Nakamura, H., 2B112
Nakamura, Takato, 1B93
Nakamura, Toshio, 4B93
Nakamura, Tutomu, 1C25
Nakano, S., 1B27, 2E52
Nakano, T., 1C25
Nakao, F., 5J79
Nakashima, R., 2D9
Nakata, N., 5H18
Nakazawa, H., 4H12
Nakhutin, I. E., 3C15
Nall, W. R., 3B148
Nam, N. V., 2B135
Namba, T., 2E13
Nambara, T., 5D58, 6D47
Namboodiri, E. G. A., 3B27
Nangniot, P., 6G1
Nanjo, M., 2J136, 3J84
Nantoe, V., 4A1*C*
Nara, A., 2C7
Narasimamoorthy, D. V., 3H35
Narita, K., 3B151
Nash, C. P., 5J60
Nasierowska, Z., 6E43
Nasr, M. S., 5H41
Nathan, R. W., 1A7, 3B132
National Center for Scientific and Technical Documentation [Belgium], 6H57*B*

Natsume, H., 2B72
Natusch, D. F. S., 3H4
Naumann, H. C., 3B63
Naumova, E. A., 6B110
Navarro, E., 3D106
Navarro, V. B., 1C37
Navarro Vaquerizo, L., 4A18
Navolotskaya, T. I., 3E22
Navratil, O., 1B102, 6B84
Nayar, P. K., 1G1
Naylor, A. G., 5A7*C*
Nazarenko, A. Yu., 6B194
Nazarenko, I. I., 5F9, 6B169
Nazarenko, V. A., 2B60, 4B74, 5B121, 6B123, 6B166
Nazarov, P. P., 6B58, 6B107
Neal, G. F., 2B9
Neamtiu, I., 1C46
Nebesar, B., 2J6
Nechaev, S. V., 6B25
Nedelcheva, M., 6C79
Nedler, V. V., 1B49, 2B31
Needham, L. L., 4D17, 6D27
Neely, W. C., 2J48
Neermolov, A. F., 5A6*C*
Nefedov, P. P., 1C73
Neff, G. S., 6D35, 6H20
Neff, J. M., 2D55
Neiman, E. Ya., 1B31, 3B124, 5B49, 5B146, 6B15, 6B150, 6B168
Nekrasova, V. V., 6B94
Nelson, G. L., 4E31
Nelson, J. O., 5G32
Nelson, J. W., 1B6
Nemes, A., 2C24
Nemeshegyi, G., 5A6*C*
Nemets, V. M., 5B13
Nemodruk, A. A., 5B146
Nemori, A., 3B11
Nerheim, A. G., 2C75
Nerubashchenko, V. V., 2B105
Nesbitt, L. E., 5A6*C*
Nesmeyanov, A. N., 6B227
Nesnow, S., 3D132
Nesterova, N. P., 1B79, 6B106
Neti, R. M., 3A1*C*
Netto, J. Z., 2B23, 2B136
Neubauer, L., 1B58
Neuerburg, G. J., 1B113
Neufeld, H. A., 5D87
Neufeld, L., 2D45
Neufield, J. H., 3G8
Neuhoff, V., 2D118
Neuner, T. E., 3G2, 4G4, 4G5
Neverova, A. K., 4B131
Nevskaya, E. M., 2B17
Newham, S. J., 5A2*C*
Newsome, F. E., 4D48
Newton, M. P., 5B81, 6J55
Ng, S., 4G7
Nghi, T. V., 1B34, 4B30
Ngo Huy Du, 4J15
Nguyen Phuoc Thanh, 5B213
Nguyen Thi Phuong Thao, 5J31
Nguyen Thuy Phuong, 1E28
Nguyen Van Nam, 2B135
Nichol, C. A., 1D27
Nicholas, D. J. D., 3D112
Nicholls, I. A., 4B66
Nicholls, P. W., 5J50
Nichols, B. L., 2D84
Nichols, J. D., 1D23
Nicholson, A. A., 5H36
Nicholson, M., 1H39
Nichugovskii, G. F., 4C3, 5C4
Nicolaides, N., 5D49
Nicolau, G., 4D45
Nicolet, M.-A., 2A1*C*
Nicolson, G. A., 6D6
Nicosia, S. Z., 2D72
Niculescu, I., 1C4
Niederlag, W., 5B195
Niedermaier, T., 3G13
Niedermayer, A. O., 3D37
Niedzielska, K., 6C12
Niefind, H.-J., 3F29
Niehus, H., 4J42
Nielsen, H., 6D46
Nielson, H. L., 6H25
Nielson, K. K., 5A5*C*
Niemann, R. A., 3B32
Niese, S., 5J109
Nieuwstraten, N., 5A3*C*
Nigam, R. C., 5G10
Nikitin, Yu. S., 3J33
Nikitina, G. A., 6B136
Nikitina, O. I., 1B142
Nikolaev, R. K., 3B29
Nikolaev, V. N., 2J144
Nikolaeva, E. M., 3B50
Nikolic, V., 5C39
Nikolics, K., 5A6*C*
Nikolov, N. K., 2B153, 3D116
Nikulina, T. A., 2B141
Ninchakova, A., 2B22
Nishi, S., 1D11, 2A4*C*, 4C76
Nishikawa, A. H., 4D60
Nishikawa, T., 2J109
Nishikawa, Y., 1B62
Nishimura, M., 4H21
Nishishita, T., 4C54
Nishiyama, N., 2F4, 2H30
Nissen, D., 2C73
Nistreanu, V., 4B32
Nitsche, R., 2J112
Njau, E., 1E10
Noack, G., 2G13
Noara, H., 5D82
Noble, R. C., 1J81, 4D9
Noda, H., 4B56
Noe, M., 1B4
Noever de Brauw, M. C. ten, 2D89
Nofal, M., 6B130
Noles, G. T., 6C13
Noll, K. E., 1H49*B*
Noller, B. N., 5H5
Nomura, T., 6B109
Noneman, J. W., 4D31
Nonidez, W. K., 3H27
Nonova, D., 1B29
Noordhoff, M. G., 5F4
Nor, Y. M., 3G11
Norheim, G., 3D11
Norkus, P., 5B97
Norpoth, K., 3D46, 5D36
Norris, M. S., 5A1*C*
Norris, T. A., 3C54
Norstroem, A., 3H48
Norvell, V. E., 3D19
Norwitz, G., 2C63, 2H47
Noshiro, M., 1H36
Noske, H.-J., 2G12
Nota, G., 2A6*C*
Novak, J., 3C24, 6A1*C*
Novakovskaya, E. G., 6B222
Novatskaya, N. V., 5B212
Novichkov, V. P., 6H46
Novikov, A. I., 5B208
Novikov, A. N., 6C55
Novikova, N. V., 5C42
Novkirishka, M., 3J85
Novobilsky, V., 3B104
Novorusskaya, N. V., 1C32
Novosel'tseva, L. A., 1B35, 5B58, 6B29
Novotny, M., 6A1*C*
Nowaczynski, W., 6D51
Nowak, K., 3H24
Nowlin, J., 5A2*C*, 6A1*C*
Nozaki, J., 6B177
Nozaki, T., 5A5*C*
Nudelman, S. N., 5E34
Nuernberger, H., 5D27
Nuessle, N. O., 3C68
Nugent, K. D., 6G9
Nyberg, A. P. W., 4A1*C*
Nyquist, G., 4H34
Nystroem, I. E., 2D148

Oace, S. M., 2D66
Oakley, P. J., 5H1
Oates, J. A., 2D71
Oba, T., 1C69
Oberbeck, W. F., jun., 2C78
Obermaier, O., 5F29
Obolentsev, L. A., 5B141
Obozhina, R. N., 4B103
O'Brien, M., 2E19
O'Brien, T. P., 2B47
Obtemperanskaya, S. I., 2C41
O'Carra, P., 1D85
Ocepek, D., 6J75
O'Connell, A. M., 2B92
O'Connor, B. H., 4H3
O'Connor, P. W., 5H27
Odagiri, H., 6F9
Odam, E. M., 5J24
Oddo, N., 3D20
O'Dell, B. L., 5G3
Odom, L. A., 3B100
Oehlenschlaeger, J., 3C21
Oehler, D. D., 1G17
Oehme, F., 2J142
Oehrle, K.-L., 6D31
Oelschlaeger, H., 4D19
Oertel, K., 4H41
Oertel, R. P., 2A1*C*, 2J101
Oeschger, H., 2H23
Oestergaard-Jensen, J. P., 6H48
Oestgren, J., 4F19
Oestling, G., 4H22
Oestman, J., 6D70
Oetjen, H. G., 5J73
Oettinger, P. E., 2F14, 4F6
Oey, L. S., 2C74, 5C60
O'Farrell, P. H., 5D79
Ogamo, A., 2F39, 3F15, 6F24
Oganesyan, L. B., 5B122
Ogareva, M. B., 5B122
Ogata, K., 1E4
Ogawa, Isao, 2H14
Ogawa, Itsuko, 3E39
Ogawa, M., 2E41
Ogawa, S., 2D81
Ogloblina, I. P., 4C14
Ognev, V. R., 6B13
Ogneva, E. Ya., 6B13
O'Gorman, P., 2D145
Oguma, K., 4B112, 5B160
Ogura, T., 1H43

guro, H., 1B118
ı, S.-Y., 1D59
ıashi, S., 4B90
ıkuma, S., 1C41, 6D67
ılidal, M., 6B114
ılson, R., 3F43
ıno, T., 2D155, 3D87
ısawa, K., 3B67, 6B217
ıta, K., 2B117
ıta, T., 5F65
ıtsuki, T., 1B47
kawa, T., 4H18
ka, A., 6F23
ka, H., 6F23
kabe, T., 1B111
kada, M., 2J153
lKeefe, K., 6J50
lKelly, D. A., 2D110
khotnikov, B. P., 1C60, 5C44
ktavec, D., 6A1*C*
kubo, T., 4B137
kuda, H., 5D104
kumura, T., 1J17, 1J18, 2J25
kuyama, K., 5J122
laru, M., 3H46
lLaughlin, J. W., 2B47, 3B107
ldham, R. D., 1A1*C*, 2B69
lech, A., 4E1
lejniczenko, M., 5B33
lenovich, N. L., 1B33, 3B41, 6B128
leson, H., 5D90
lin, J. G., 6H1
liveri-Vigh, S., 2E25
livier, C., 5A5*C*
l'khovtseva, Z. I., 1J68
ller, W. L., 3G35
lmez, I., 1D9, 3B170
lsen, K. J., 4A1*C*
lson, A. C., 3F7
lson, C. L., 2D47
lson, D. H., 1J50
lson, K., 5J6
lson, W. A., 2D43
matsu, M., 2B45
menetto, N., 4J57
mura, M., 2D23
ndov, J. M., 3B170
ndrejcin, R. S., 2A7*C*
'Neil, R. A., 2A4*C*
no, A., 1B147
no, Y., 4C44, 4C63, 6C66
nosov, V. N., 6B143
nur, E., 6E31
oghe, W., 5B100
p de Beeck, J. P., 4B50
pheim, L.-N., 5J99
pitz, N., 4J51
range, J. M., 3A1*C*
rdelman, J., 2B30
regioni, B., 6H47
'Reilly, J. E., 2D137
rel, V., 6B114
reshkin, V. N., 4B12, 6J51
rf, G. M., 6B17
rie, N. G. M., 5D30
rlenkov, I. S., 6B21
rlov, V. V., 5B204
rlov, V. Yu., 6C36
rlov, Yu. E., 6B210
rme, J. P. R., 3G20
rnaf, R. M., 6D58
rr, B. H., 3D7
rr, J. R., 2B164*B*
Ortega, F. A., 1D55
Orth, R. A., 3G42
Ortner, H. M., 2B75
Orvini, E., 5A5*C*
Orwell, R. L., 3D124
Orzhekhovskaya, A. I., 5B113
Osadchii, V. D., 5C9, 6C43
Osakwe, A. A., 2A18
Osantowski, J. F., 5J37
Osborne, D. J., 6E30
Osei, Yu. P., 5G1
Oshchepkova, E. P., 6C82
Oshima, K., 1B63
Oshima, S., 4C54
Oshman, V. A., 5H9
Oshurkova, O. V., 6B3
Oslopovskikh, V. N., 5B75
Osman, S. F., 1G3
Osorio, C., 3D76
Ossicini, L., 6B185
Ossip, P. S., 2C64
Ostachowicz, J., 6B238
Ostapenko, I. T., 4B42
Ostapenko, V. F., 5B149
Osten, D. E., 2A1*C*
Osteryoung, R. A., 2A1*C*, 2B110
Ostrogovich, G., 2C24
Ostrovidov, E. A., 2B133
Otomo, M., 5B188
Otozai, K., 1B5
Ott, R., 6H14
Ott, W. R., 4J43
Ottaway, J. M., 2B10, 4A4*C*, 4B77
Otteneder, H., 2G25
Ottesen, D. K., 3B25
Otto, G. W., 6A3*C*
Otto, M., 1B169
Oura, S., 5A6*C*
Outon, L., 1D55
Ovchar, L. A., 6B90
Ovchinnikova, V. A., 1C59
Ovenall, D. W., 2A1*C*
Overkamp, B., 2B142
Owen, J. M., 2J40
Owens, E. G., 2A1*C*
Owens, J. W., 6B231
Oya, T., 3C23
Oza, V. T., 1B126
Ozand, P. T., 1D92
Ozawa, T., 3B119
Ozcimder, M., 2G28
Ozeki, Y., 5H18
Ozhegov, P. I., 1B166
Ozieblo, I., 2E7

Paal, T., 2E1
Pace, J., 5D87
Pachadzhanov, D. N., 6B51
Pachuliya, N. V., 6B229
Packer, K., 2G39*B*
Padel, J., 1B58
Padhya, M. D., 1B126
Pagani, M., 2J21, 2J22
Page, B. D., 4F23
Pahil, S. S., 1C45
Pak, S. J., 6A2*C*
Pakholkov, V. S., 6B11
Pakhomov, V. P., 3J33
Paklerova, L. D., 1B149
Palamand, S. R., 1F16, 4A3*C*
Palamarchuk, A. S., 4F2
Pal'chun, T. A., 1B87
Palenque, E., 3D13
Palermo, E. F., 2A1*C*
Palese, M., 3D63
Paletto, S., 3J78
Palik, E. S., 5A7*C*
Palmer, H., 4A1*C*
Palmer, P. A., 4D22
Pal'nikova, T. I., 3B98
Palocsay, F. A., 6C1
Pal'shin, E. S., 6B94
Pal'yanova, M. V., 4C4
Palyshin, E. S., 5B153
Panaeva, S. A., 6C34
Pancirov, R. J., 5A1*C*
Pande, C. S., 5B129
Pande, U. C., 5E42
Pandjojo, W., 4C84
Pang, T., 2A4*C*
Panin, A. I., 1B177
Pank, F., 1G13
Pankov, A. G., 6A1*C*
Pankova, M., 1C72
Panouse, J. J., 5C27
Pantaler, R. P., 5B203
Pantarotto, C., 4D25, 6A1*C*
Pantel, S., 1B16, 4B6
Panteleimonova, A. A., 5B54, 5B117
Panukhnik, I. I., 5B114
Panzardi, P. J., 3H42
Paorici, C., 1B50
Papadakis, N., 3J66, 3J67
Papariello, G. J., 6J5
Paparone, D., 5A6*C*
Papastathopoulos, D. S., 4D43, 5J96
Papazova, P., 6E11
Pappas, A. C., 2H16
Papworth, L., 1D93
Paralescu, I., 3D8
Parasher, C. D., 3D120
Pardue, H., 2A1*C*, 2A7*C*, 5A2*C*
Pardun, H., 3F44
Parees, D. M., 6B18
Parekh, A. C., 5D55
Pareles, S. R., 2F11, 2J44
Parfenov, I. V., 1C9
Paria, P. K., 2B152, 3B166
Parinov, V. Ya., 4G12
Park, D. L., 4F18
Park, K. H., 2D156
Park, M., 2D140
Parkash, R., 1C12, 2C32, 2C33
Parker, C., 2A1*C*
Parker, C. R., 2A1*C*
Parker, E. H. C., 2J113
Parker, L. R., jun., 5J48
Parkhomenko, E. A., 1B177, 6B73
Parks, G. J., jun., 4D8
Parlar, H., 6C98
Parmar, D. S., 1B107, 3B116
Parodi, P. W., 3F12
Parpiev, N. A., 1B134
Parr, W., 6A1*C*
Parreira, F., 2D129
Parrish, J. R., 6J11
Parsons, M. L., 2A1*C*, 3J58, 5J52
Parsons, S. M., 4D73
Partington, G. L., 2H38
Parvanescu, H., 2E42
Paryjczak, T., 4B165
Parzefall, W., 3J89*B*
Paschal, D. C., 5D14
Pascual, V. L., 6J3
Pasculescu, M., 2C49

Pashchenko, E. N., 3B160
Pasquare, N. J., 3D55
Passarelli, R. J., 4C65
Passmore, W. O., 1B178
Passonneau, J. V., 4D36
Pasternack, A., 2J8
Pasternak, A., 6E41
Pastor, T. J., 1C3
Paszner, L., 6C81
Patel, B. B., 1B135, 5B179, 6B65
Patel, B. S., 1B135, 5B179
Patel, K. K., 3B113
Patel, M. M., 1B170
Patel, M. R., 1B170
Patel, N. C., 6B65
Patel, R. S., 3B113
Patel, S., 2D145
Patil, S. P., 2B40
Patil, V. K., 5C48
Patke, S., 4B116
Patnaik, S., 1G1
Paton, W. D. M., 2E15
Patriarche, G. J., 1E49, 5E29, 6C30
Patrikeeva, N. A., 1B99, 1B100, 5B131
Patsalos, P. N., 5D19
Patterson, D. S. P., 5G22
Patti, F., 5A3*C*
Pattyn, W. J., 5E39
Patwardhan, A. B., 6B105
Paucescu, S. D., 1C65
Paukstelis, J. V., 1B82
Paul, D., 6E36
Paul, J. I., 1C82
Paul, R. C., 1C12, 2C33
Paul, S., 3C77
Paules, P. E., 3A1*C*
Paulik, F., 5A6*C*
Paulik, J., 5A6*C*
Paulsch, W. E., 3G17
Paulsrud, J. R., 2D69
Paun, V., 3H11
Pauwels, J., 5B155
Pavlenko, L. I., 1B166, 5H19
Pavlikowski, F., 2E53
Pavlinskii, G. V., 3J56
Pavlova, V. K., 5B70
Pawaskar, P. B., 2J150
Pawlaczyk, J., 5E44
Payne, K. W., 1B89
Pazandeh, H., 6J47
Pazlar, M., 3F45
Peake, B. M., 2B19
Pearson, D., 1F25, 4F21
Pearson, G. J., 2A4*C*
Pearson, J. D. M., 2D40, 3D98
Pearson, P., 2J133
Pearson Murphy, B. E., 2A3*C*
Pearton, D. C. G., 3B99
Pecci, J., 2E28
Pecci, L., 5D98
Peck, E. S., 6B66
Pedersen, K. O., 4A1*C*
Peeler, J. T., 5F13
Pehle, W., 5C43
Peisach, M., 5A5*C*, 6B55, 6B62
Pekenc, E., 5A6*C*
Pekov, G. I., 6B211
Pelizzetti, E., 3B135, 5B180
Pellerin, F., 6C100*B*
Pelletier, O., 5F70
Pellizzari, E. D., 1H14
Pelosi, C., 1B50
Penchina, C. M., 5J39
Pendersen, K. B., 5A5*C*
Penner, M. H., 1E42
Pennings, A. W., 3D125
Pensa, B., 5D98
Pentek, G., 3H11
Penttila, I. M., 4A1*C*
Penzhorn, R.-D., 6C31
Perchalski, R. J., 6J52
Perdomo, M. F. M., 6B125
Perego, R., 3E42
Perel'dik, A. P., 6C76
Peretrukhin, V. F., 6B102
Perez, A. S., 5D69
Perez, F. P., 4B166, 5B206
Perez, S. R., 2B76
Perezhogin, G. A., 5B148
Perez Ruiz, T., 4B14, 4B133
Perkins, A. W., 5A2*C*
Perkins, E. G., 3D85
Perkins, R. W., 6H25
Per'kov, I. G., 4B140
Perrault, G., 4B168
Perrett, D., 4D58
Perron, W., 5A6*C*
Perros, T. P., 5C61
Perry, E. G., 6B218
Perry, J. A., 3J23, 3J24, 5J22
Perry, R., 4H14, 5A3*C*
Perry, R. B., 6A3*C*
Perschak, F., 6F8
Persiani, C., 2B124, 2C83
Persson, J., 6D8
Pervunina, R. I., 2H20
Peshin, A., 5D61
Peshkova, V. M., 5B183
Pessa, M., 2J59
Peter, F., 5C19
Peterkofsky, B., 1D91
Peterkova, M., 6D30
Peters, J. H., 2E43
Peters, J. M., 5B192
Petersen, E. M., 2C3
Petersen, G. B., 2D138
Peterson, G. E., 5F5
Peterson, J. A., 2J94, 5J53
Peterson, J. E., 2D48, 2G32
Peterson, J. R., 2B71
Peterson, R. J., 3F47
Pethes, E., 5E21
Petkov, V., 6J23
Petkus, I. D., 1J68
Petrakovich, V. E., 3C83
Petri, H., 1B176
Petri, S., 3B108
Petronio, B. M., 2H45
Petropavlovskii, G. A., 6C77
Petrov, A. A., 5B13
Petrov, B. I., 1B11, 1B70, 1B98, 4A12
Petrov, S. I., 1B86, 2B82
Petrova, E. I., 1B64, 5B103
Petrova, N. A., 1B177
Petrova, T. V., 5B61
Petrucci, M., 5A6*C*
Petsev, N., 6J23
Pettersen, J. E., 4A1*C*
Pettersson, S., 6A2*C*
Pettifer, R. E. W., 4J35
Pettinati, J. D., 5F21, 5F24
Pevzner, I. D., 5H44
Pfaff, M.-C., 6D21
Pfaffenberger, C. D., 6A1*C*
Pfannhauser, W., 3F5
Pfeifer, S., 1D19
Pfeiffer, G., 1F10
Pfeiffer, S. L., 4F4
Pfirter, W., 6C7
Pfister, K., 3C72
Pflugmacher, J., 2G29
Pfrepper, G., 3B71
Phaff, H. J., 3D129
Pham Thi Hong Mai, 4D11
Phan, L. X., 3E35
Phan Trong Tai, 4F27
Phan Vinh Phuc, 6B119
Philippot, J. C., 6B236
Phillipou, G., 5D46
Phillips, C. R., 1H1, 1J97
Phillips, C. S. G., 6A1*C*
Phillips, D. L., 3E37
Phillipson, R. T., 5G12
Phuc, P. V., 6B119
Phuoc Thanh, N., 5B213
Phuong, N. T., 1E28
Phuong Thao, N. T., 5J31
Pias Barbiera, J., 2C17, 4C11
Picard, J., 3D57
Picer, M., 6H52
Picer, N., 6H52
Pichet, P., 2A4*C*
Pichugina, V. M., 4B36
Pickering, W. F., 3B118
Pickett, E. E., 3J32, 4G4, 4G5
Pickett, R. A., II, 6H8
Pickford, C. J., 6D3
Picquet, P., 5A6*C*
Picunko, T., 3J5*P*, 3J65*P*
Pidacks, C., 2A1*C*
Piechocka, J., 3G44
Piekos, R., 2C25
Piemont, E., 3B129
Pieper, D. J., 4D7
Pierce, F. D., 2J85, 6H40
Pierce, J. O., 5A5*C*
Pierce, R. C., 4H15
Pierson, H. E., 6J29
Pies, R., 2C56
Pietra, R., 2D7
Pietrogrande, A., 2C6
Pignatelli, B., 6F5
Pike, W. T., 5J80
Piksarv, A., 5B79
Pilipenko, A. T., 2C43, 3B97, 4B1(
4B78, 4B121, 4B147, 4B163
5B70, 5B126, 5H24, 6B14, 6B73
6B154, 6B190
Pillay, K. K. S., 5A5*C*
Pilnik, W., 6F26
Piloyan, G. O., 5A6*C*
Pinegina, N. D., 6B225
Pino Perez, F., 4B166, 5B206
Pinta, M., 2B77
Pinte, G., 6B20
Piotrowska, A., 5C29
Piper, D. W., 3D124
Piper, R. F., 2D132
Pippen, E. L., 1F23, 2F50
Pique, A., 5J13
Pirnipuu, M., 5B29
Pirozhkova, E. A., 3B50
Pirrwitz, J., 1B140
Piskunov, E. M., 3B87
Pitalev, V. G., 1B78
Piti, T., 3J14
Pitkanen, E., 4A1*C*
Pitkin, D., 2E19
Pitt, W. W., jun., 4C30

ittwell, L. R., 6H36
iven', N. S., 6H46
ivonenkov, L. P., 1C40
lacek, K., 2C10
lakogiannis, F. M., 4E29
lankey, F. W., 2A1*C*, 5B5
latonova, G. P., 1B145
latonova, T. V., 3C83
latonow, N., 4D32
lattner, E., 2F23
laza, H., 5A5*C*
laza, J. G., 6B28
lesch, P. H., 6C19
lesch, R., 2B145, 2J60, 2J62
leshakova, T. V., 6B180
leskach, L. I., 5G11
lesu, V., 4C50
liner, Yu. L., 1B141
lotnikov, R. I., 6B35
lotnikova, R. N., 2B102
lucinski, C. E., 2A7*C*
lunkett, R. D., 4E36
luzhnik, T. I., 4B97
nev, V. V., 2B13, 6B152
o, A. L. W., 4E35
ochina, I. I., 4H8, 4H11
ochinok, V. E., 6B209
ocock, K. F., 1F19
odchainova, V. N., 6B80
odlaha, O., 3F43
odlesny, J., 3G41
odracha, E., 5J105
od'yacheva, G. M., 6J21
odzolko, L. G., 3B131
oe, D. P., 2J143
oege, A. W., 2D124
oehler, T. O., 1J43
oehlmann, H., 1D19
oerio, E., 5D101
ogoida, I. I., 5B159
ogosbekyan, G. V., 1C60
ogranichnaya, R. M., 2B105
ohl, U., 1J14
ohloudek-Fabini, R., 1E43
oirier, M., 2C8
oirot-Lagubeau, J., 4E9
oklis, A., 1D37
oko, Z., 5A6*C*
okorny, J., 4F27
okorny, S., 4F27
olacek, J., 2J13
olig, E., 3J90
olikarpova, N. V., 6B180
olishchuk, O. M., 5H43
olitzer, I. R., 3D2
ollak, K., 2G34, 6B1
ollitt, R. J., 2D64, 2D94
ollock, G. D., 4D7
olokoff, M. A., 3D133
oluboyarov, V. A., 5B211
oluektov, N. S., 1B67, 1H30, 5B92, 6B83, 6B89, 6B90
oluektova, E. N., 4B123, 6B166
olyakov, Yu. N., 6B110
oncet, M., 2B8
onnamperuma, C., 3G12
onomarenko, G. B., 6B150
onomareva, V. G., 6B29
onomareva, V. M., 2B83
onosov, I. N., 1B11, 4A12
onosova, E. V., 4B55
ons, W. A., jun., 2G15
opa, G., 3B130, 4B117, 5J94, 6B224
Popandopulo, Yu. I., 6B227
Popelyukh, G. M., 2B106
Popendorf, W. J., 1H22
Popescu, I. C., 3B59
Popescu, S., 1E5, 3E7
Popl, M., 6C63
Popov, G. N., 2B13
Popov, V. A., 1B87
Popova, I. A., 1B166
Popova, N. A., 6C35
Popova, N. Kh., 5C40
Popova, N. N., 5B57
Popova, O. I., 4B81
Popova, S., 6C79
Popovic, D. A., 2D135
Popp, U., 1F14
Poppe, H., 4J12, 6A1*C*
Porter, W. H., 1D101
Porthault, M., 5B21
Portnoi, Yu. A., 2E18
Portych, J., 3E47
Porubszky, I., 5A6*C*
Poschenrieder, W. P., 5J73
Posgay-Kovacs, E., 5E41
Poskrebysheva, L. M., 4H28
Posma, F. D., 1D7, 6J56
Post, A., 1E47, 2C48, 2E19, 4E23
Postnikova, I. S., 6B221
Postnikova, V. A., 6C88
Potapenko, S. G., 5C15
Potapov, M. A., 5J72
Potapova, S. A., 5B210
Potapova, S. F., 6B90
Potapova, T. I., 5C37
Poth, B., 2G12
Potman, W., 1C7
Potter, A. L., 1F23, 2F50
Potter, R. H., 1F12, 3F52
Potthast, K., 5F27
Potti, E. E., 4G35
Pottier, L., 4F32
Pouraghabagher, A. R., 6A3*C*
Povinec, P., 2C5
Povoledo, D., 2A4*C*
Povolotskaya, M. I., 2J32
Powell, B. D., 2J73
Powell, C. E., 2D16
Powell, F. E., 2F35
Power, L. F., 3J69
Pozharova, V. P., 1C71
Prachar, O., 4B21
Pradzynski, A. H., 2H3, 5A5*C*
Prakash, D., 1B137, 1B138, 5G10
Prakash, O., 2B122
Prasolova, O. D., 2B130
Pratt, M. A., 4J1
Pravolus, L. I., 3C2
Preen, M. A., 3F31
Prescott, B., 4C15
Preston, K. R., 3G4
Preston, J. L., 1D101
Pretorius, R., 6B55
Pretorius, V., 2J34, 6A1*C*, 6J20
Pretsch, E., 5J91
Preuss, F. R., 3E29
Prevot, A., 2G11
Pribil, R., 3B72, 5B125
Pribram, J. K., 5J39
Price, R., 2D139
Price, W. J., 3B6
Prime, D. M., 6E30
Prince, R. H., 1J31
Prishchepov, L. F., 1B165
Proctor, W. E., jun., 6J70
Prodavtsova, E. I., 3B52
Profio, A. E., 6A3*C*
Prokes, J., 1E11, 3D59
Prokopenko, S. A., 5B36
Proksch, G., 3D16
Pronin, V. A., 2B158, 6B43, 6B46
Prosen, E. J., 2A1*C*
Prosic, Z. A., 4G25
Proske, G., 1E13, 5E19
Prost, L., 2J108
Prost, M., 6A1*C*
Protopopova, N. P., 6B131
Proveaux, A. T., 3J11
Prudnikov, E. D., 3B7, 5B6, 5B34
Pruemke, H.-J., 2E12
Pruska-Wysocka, B., 4E10
Pruvcheva, K., 4B28
Pruzinec, J., 1H12
Pryde, A., 6A1*C*
Przyborowska, M., 1C27, 6C59
Przyborowski, L., 4B8
Pszonicki, L., 4B113, 5B162
Puech, A., 3E10, 6E3
Puetter, J., 1D24, 2D33
Puhakainen, E., 4A1*C*
Pui, C.-P., 4B141
Pullarao, Y., 1B26, 2B127, 6C46
Pulyaeva, I. V., 5B203
Pung, L., 5B29
Pungor, E., 2D6, 2H13, 2H39
Punt, J. M. H. M., 3D125
Punwar, J. K., 2F48
Puphal, K. W., 2A7*C*
Purcell, J. E., 5J34
Purcell, J. M., 2A1*C*
Purdham, J. T., 6D7, 6D13
Purkayastha, B. C., 5D7
Purnell, J. H., 6A1*C*
Purvis, K., 3D75
Pusey, D. F. G., 4A5*C*
Pust, H. W., 3A1*C*
Putinier, R. A., 3C54
Putnam, J. M., 2A1*C*
Putnam, T. B., 2G36
Putnins, R. F., 4D10
Puzanov, A. A., 3B9
Puzniak, T. J., 3A1*C*
Pyastosin, L. P., 1B70
Pyatnitskii, I. V., 2B22, 2B147, 3B93, 4B79, 4B82, 4B154, 5B51, 6B9
Pym, J. G., 3C40
Pyrcz, J., 5F22

Qazi, A. H., 5B109
Quam, K., 2A2*C*
Quillfeldt, W., 1J37
Quimby, D. J., 2A1*C*
Quintard, B., 5D44
Quintard, P., 5D44
Qureshi, I. H., 6B202
Qureshi, M., 3B3, 3B4, 3B95
Qureshi, S. Z., 3C4

Raabo, E., 4A1*C*
Raats, P., 5G12
Rabel, F. M., 2A1*C*
Raber, H., 2B21
Rabinovich, B. S., 6B169
Rack, E. P., 5A5*C*
Raddatz, F., 5D74
Radhakrishnan, T., 3B167

Radke, M., 1D49
Radmacher, H. W., 4B145
Radulovic, D., 5E31
Ragab, M. T. H., 3G24
Ragaini, R. C., 3B170
Raghavan, P. S., 1B8
Rahaman, M. S., 2A1*C*
Rai, P. P., 3E15
Raics, P., 4B47
Raidt, H., 3D46
Rains, T. C., 2A1*C*, 4J61*B*
Rais, J., 6B27
Rajagopal, S., 6J34
Rajagopalan, T. G., 6D24
Rajendran, S. A., 3F42
Rajput, A. R., 5J93
Rajput, R. P. S., 3B3
Raju, N. A., 1B163
Rakhlina, M. L., 6B39
Rakhmankulov, Sh. M., 5C2
Rakitzis, E. T., 4C26
Rakovskii, E. E., 4B167
Ralhan, N. K., 2C47
Ralhan, S. M., 2C47
Ralls, J. W., 1F24
Ramachandran, S., 6A1*C*
Ramadan, A. A., 1B86, 2B82
Ramakrishna, T. V., 3C10, 3H35
Ramakrishnan, R., 6C42
Ramamoorthy, M., 3E31
Ramanathan, P. S., 5J28
Ramanujam, V. M. S., 4A9
Ramappa, P. G., 1B171
Ramasamy, J., 1B82
Ramendik, G. I., 5J72
Ramirez-Munoz, J., 4H26
Ramla, M., 2B80
Ramonaite, S., 6B139
Ramontian, E., 1E14
Ramsden, S. A., 4J33
Ramseyer, G. O., 2H31
Ranby, B., 3C77
Rance, M. J., 1D23
Rancitelli, L. A., 3B170
Randa, Z., 2B53
Randall, V. G., 2F50
Randhawa, T. S., 4B48
Randle, K., 2B160
Ranfft, K., 3G16, 6G5
Rangaswamy, J. R., 5G30
Ranieri, R. L., 3E12
Ranjitkar, K. P., 2B101
Rankine, B. C., 1F19
Rank Organisation Ltd., 3J3*P*
Rao, A. L. J., 3B35, 5B4
Rao, A. P., 5B35
Rao, G. G., 4A13, 5B144
Rao, G. R., 4E34
Rao, K. S., 2B119
Rao, M. K. G., 3D85
Rao, N. V., 1A4, 1A5
Rao, S. B., 1B163
Rao, S. N., 3E31
Rao, S. P., 5B44
Rapp, A., 4F36, 5F57
Rapp, U., 2A6*C*
Rappe, C., 3H48
Rashid, I. A., 4A11
Rashidov, K. D., 4B39, 5B82
Rasmussen, K., 4A1*C*
Rasmussen, K. E., 2E14, 6E10
Rasmussen, R. A., 3H2
Raspi, G., 4B61, 5B98, 5B133
Rastunov, L. N., 3C15
Rathi, M. S., 3C4
Rathjen, C. P., 4D63
Rathore, H. S., 3B4
Raudsepp, H., 4C73
Ravaine, D., 3B146
Ravey, M., 6C85
Ravitskaya, R. V., 2B60
Rawat, J. P., 3B95, 3B106, 4J13
Raymond, A., 4H13
Rayner, E. T., 4G18
Rayside, J. S., 5J38
Read, G., 6D69
Reader, J. R., jun., 3A1*C*
Rebel, G., 3D74
Rebentish, B., 1D78
Rechnitz, G. A., 2A1*C*, 4D43, 5J86, 5J96
Recker, R., 5A5*C*
Redding, P. L., 3B88
Reddy, G. R., 2J150
Reddy, G. S., 2A1*C*
Reddy, T. A. S., 5B44
Redweik, U., 6A1*C*
Reed, P. R., 5C53
Reed, W. P., 5A7*C*
Reeder, S. K., 4F25
Reedy, G. T., 5J62
Regan, J. G. T., 4B68
Regnaud, F., 6B103
Rehg, W. R., 6A1*C*
Rehner, T., 1C76
Reibarkh, Ya. R., 6C76
Reich, R. M., 5A2*C*
Reichling, J., 2G35, 4G36
Reifenstein, H., 1G13
Reig, F. B., 5B3
Reilly, P. E. B., 3D65
Reimer, G. M., 2H26
Reimerdes, E. H., 1F14, 3D3
Reinbold, B. L., 3J39
Reinbold, G. W., 6F18
Reinefeld, E., 4H44
Reinhard, G., 1B140
Reisfeld, R., 1B90, 5B37
Reiss, J., 1F6, 2F19
Reiss, R. F., 4D64
Reiszner, K. D., 2H8
Reiterer, H. D., 4B4
Rekhlits'ka, L. M., 6B132
Remane, H., 1C44
Rembielinska, K., 4E46
Remme, J., 6E4
Renan, M. J., 5B116
Renard, J. J., 3C71
Renner, J. A., 4C81
Renner, R., 3F36
Rensel, W. B., 4J24
Repkina, V. I., 4H46
Resmann, A., 6B45
Retamar, J. A., 1C64
Rethfeld, H., 5A3*C*
Retief, D. H., 3D21
Reuter, W., 6J41
Reuter, W. F., III, 4D1
Revel, G., 3B127, 5A5*C*
Revenko, A. G., 6B35
Revin, Yu. V., 5B114, 5B152
Revuelta, D., 1F21
Revuelta, G., 1F21
Rexroad, P. R., 3G2
Reynolds, L. M., 2A4*C*
Reynolds, S. A., 2A7*C*, 6H35
Rezl, V., 1C6, 6B33
Reznik, A. M., 2B61
Reznik, B. E., 2B105
Reznikov, S. A., 5H16
Rhea, U., 5F13
Rhee, S. G., 1D88
Rheinhuette-Scheerle Akt.-Ges., 2C71
Rhodes, C. T., 2E34
Rhodes, H. J., 4E28
Rhodes, J. R., 2H3, 6A3*C*
Rhodes, L., 4D4, 4H10
Rhom, T. J., 2J136
Riandey, C., 2B77
Ribes, M., 6E3
Ribo, J. M., 1D47
Rica, I., 4B1
Riccardi, R., 4B63
Ricci, E., 5J108, 6A3*C*
Rice, L. I., 3C63
Richards, A. H., 5J56
Richards, J. A., 1J56
Richards, R. G., 3D64
Richardson, A. St. C., 5A4*C*
Richter-Landsberg, C., 2D118
Rickansrud, D. A., 5F26
Ricouard, J. P., 4B107
Rieder, R., 2A6*C*
Riederer, J., 6C92
Rienzi, R., 5D68
Riess, W., 6D24
Rietz, B., 2D149
Rietz, R. R., 3J40
Riggs, W. M., 5B15, 6J43
Righetti, P. G., 2J21, 2J22, 6A2*C*, 6J32*B*
Rigin, V. I., 5B74
Rigo, A., 4D71
Riis, V., 2D85
Rijks, J. A., 2A6*C*
Rilbe, H., 6A2*C*
Riley, J. E., jun., 2B57
Rimer, U., 6D50
Rimpler, M., 5J10
Rinaldi, A., 1D61, 6D63
Rinalduzzi, B., 6D62
Riner, J. C., 6D9
Rioux-Lacoste, C., 3E26
Ripoll, J. C., 5B3
Rippetoe, W. E., 2A1*C*, 6J48
Ripphahn, J., 6A1*C*
Riquelme, P. T., 1D106
Risby, T. H., 2H7, 3J39, 6J27
Risebrough, R. W., 3C92
Risk, C. A., 6D19
Ritchey, W. M., 2A1*C*, 2B96
Ritchie, D. G., 1D105
Ritchie, R. K., 2C53
Ritskes, T. M., 3F10
Ritter, G. L., 2J103, 6A20, 6J61
Riva, A., 5C12, 5C13
Riva, E., 5D24
Rivera, A., 6J2
Rix, I., 2A1*C*
Rizvi, S. S. H., 6F19
Robbins, W. K., 2A1*C*, 3C43, 6C64
Robel, E. J., 5D6
Roberfroid, M., 5D41
Robert, J., 3D74
Roberts, B. A., 5G22
Roberts, R. E., 3G28
Roberts, R. J., 4J16
Robertson, D. J., 5H6
Robertson, J. H., 4E22, 6A1*C*
Robinson, B. W., 2B108
Robinson, G. A., 4J35

Robinson, G. W., 4D54
Robinson, J. J., 1A1*C*
Robinson, J. W., 2C54, 2J129*B*, 3H8, 4D4, 4H10, 5H12
Robinson, R. A., 3D12
Rocchetti, R., 3D9
Rodbard, D., 1J13
Rodel, M. G., 5H28
Rodenburg, W. W., 6A3*C*
Roder, S. J., 4G37
Rodriguez, R. A., 1B125
Rodriguez Alonso, M., 4A18
Rodriguez Perez, S., 2B76
Roeder, E., 1J16, 5E43
Roegner, V., 1D97
Roellgen, F. W., 3B8
Roels, H., 5A3*C*
Roeraade, J., 2A6*C*
Roerig, D. L., 3D28
Roesick, U., 3B51
Rogelet, P., 1B132
Rogers, I. H., 2H46
Rogers, R. W., 2A1*C*
Roijers, A. F. M., 5D11
Roizenblat, E. M., 5B68
Rojowska, M., 1C51
Rokosz, A., 1B41, 1B45, 4B37, 5B71, 6A11
Roman, M., 3E45
Roman Ceba, M., 6A12, 6B124, 6B140, 6B148
Romano, S. J., 4C81
Romina, N. N., 5C42
Ronsmans, G., 5H13
Rook, H. L., 3D22, 3D24
Rooney, R. C., 2D8
Roosken, A. A., 5A3*C*
Rootwelt, K., 6D65
Rooze, A. F., 6J56
Rosasco, G. J., 4J55
Rose, M. E., 1D73
Rose, O., jun., 6B7
Rosen, A. H., 1J103*P*
Rosen, J. D., 2F11, 2J44
Rosenberg, M., 1D97
Rosenbury, J. B., 4F18
Rosencwaig, A., 1J65, 2A1*C*
Rosenmund, H., 5D56
Rosiek, J., 4J31
Roskoski, R., jun., 1D95
Ross, R., 6B115
Ross, R. G., 2H43
Ross, W. C., 5D6
Ross, W. D., 2A1*C*, 6A1*C*
Rossbach, V., 2C73
Rosset, D., 2G11
Rosset, R., 1E31, 5C19
Rossi, G., 6D3
Rossinskaya, E. S., 6B178
Rotaru, M. D., 1C65
Rothman, L. D., 2J95
Rotilio, F., 3E42
Rotilio, G., 4D71
Rotin, V. A., 1C60, 5C44
Rounbehler, D. P., 2F12, 2F13, 4F6, 5H35
Rousseau, R., 6J37
Rousselet, F., 5C20
Roux, E., 5F58
Roux, J.-P., 5B21
Rowe, C. J., 2A1*C*
Rowinska, L., 1B83
Rowson, J. J., 2C50
Roy, B. R., 1F5, 1G21, 3F24, 5F46
Roy, R. N., 3D4
Roy, S. K., 4B172
Royer, J., 3H49
Royer, J. L., 3B18
Rozanska, B., 2C21
Rozanski, A., 5C47
Rozenberg, V. R., 4C94
Rozenblum, V., 3H28
Rozett, R. W., 2C3
Rozhnova, M. V., 6C35
Rozsa, A. N., 2C68
Rozycki, Z., 3D88
Rubalcaba Luna, Kh. M., 6B125
Rubery, P. H., 5D95
Rubin, R. W., 2D119
Rubinskaya, T. Ya., 2B129
Ruby, R. H., 1J28
Ruch, J. E., 6C26
Ruch, R. R., 6A3*C*
Rudenko, B. A., 1C31, 6A1*C*, 6J16
Rudenko, E. I., 1B87
Rudnevskii, N. K., 3B65
Ruechel, R., 2D118
Ruecker, G., 1E2
Ruediger, K., 5B173
Rufeh, F., 2F12
Ruiz, T. P., 4B14, 4B133
Rulon, V. P., 5D10
Rundquist, R. T., 2D21
Runnels, J. H., 3C42, 6C64
Rusheed, A., 5B109
Rusin, A., 6C69
Rusin, V. N., 3E19
Rusina, O. N., 2B94
Rusovic, N., 2J68
Russell, A., 2B124
Russell, D. H., 3D86
Russell, M. A. H., 3D32
Russu, A. T., 6B162
Rustamov, N. Kh., 4B39, 5B82
Ruste, J., 3B19
Rusu, V., 4H6
Rutherford, B. S., 2E47
Rutkowska, E., 5C47
Rutowski, M., 1C70
Ruutu, R., 5D13
Ruveda, M. A., 1C29
Ruvinskii, O. E., 4B131
Ruzicka, E., 1B39, 5B187
Ruzicka, J., 3J6, 5G2, 5H25
Ryabeka, V. P., 1B142
Ryabinina, A. F., 5H9
Ryabushko, O. P., 4B10, 4B163
Ryan, D. E., 1B38, 2D22, 3J63
Ryan, J. F., 3G34, 3H23
Ryan, J. J., 5D33, 5F44
Ryan, M., 2D83
Ryan, T. R., 5A5*C*
Ryashentseva, M. A., 2B129
Rybalov, A. B., 1B18
Rybina, T. F., 3B156
Rykov, A. G., 3B87
Ryle, G. J. A., 2D16
Ryman, R. G., 2D16
Ryon, R. W., 2H19
Ryzhov, V. N., 4B100
Rzhevina, L. A., 6B3

Saad, A. M., 4E29
Saavedra, J., 2B76
Sabbioni, E., 2D7
Sacks, R. D., 2A1*C*, 2J83, 3J62, 6B16
Sadee, W., 1D29
Sadjadi, B., 1C2
Sado, T., 3D42
Safar, M., 6C60
Safe, S., 4D32
Saferstein, R., 2C85
Safin, Yu. A., 4C94
Safronova, N. S., 5H19
Safronova, S. V., 5B68
Sagara, K., 2E33, 3E40
Sahgal, R. K., 1B137
Sailer, K., 4B47
St. John, G. A., 5H17
Saito, M., 4B144
Saito, S., 5J112
Saito, Taichi, 2B66
Saito, Toshio, 4B112
Saito, Z., 3D84, 5D60
Saitoh, K., 3B22
Saitoh, N., 4H18
Sajo, M., 5A6*C*
Sakaguchi, T., 1E4, 3C23
Sakai, I., 1C41
Sakai, K., 6B8
Sakai, T., 3E39
Sakakibara, E., 2D100
Sakakibara, J., 3G38
Sakakibara, Y., 2D86
Sakal, I., 2G31
Sakamoto, T., 3B62
Sákodynskii, K. I., 6C38
Sakudo, N., 2J116
Salbu, B., 2H16
Salemink, C. A., 1E9
Salen & Wicander AB, 3H41*P*
Salikhdzhanova, R. M.-F., 1J68, 6B213
Salikhov, V. D., 4B44
Salinas, F., 5B60, 6B28, 6B79, 6B179, 6B214
Salmon, L., 2J149
Salo, E. J., 4A1*C*
Salole, E. G., 6D23
Saltzman, B. E., 6H16, 6H22
Saltzman, R. S., 3A14*B*, 5H7
Salvesen, B., 6E4
Salzer, U.-J., 2F32
Samadi, A. A., 5B169
Samarai, L. I., 6B220
Sambrook, J., 4J16
Samchuk, A. I., 5H24, 6B14
Samejima, K., 2D87
Sammons, M. C., 2C4
Samperi, R., 4C6, 4C62
Sampson, D., 4D37
Samuel, U., 5C43
Samuelson, O., 4H45, 5F47, 6C78
Sanad, W., 3B70
Sanchez, A. G., 2B76
Sanchez, L. G., 2C17, 4C11
Sanchez, M. L., 5J107
Sanchez-Pedreno, C., 4B14, 4B133, 4B138
Sanchez Perez, A., 5D69
Sand, J. R., 2A1*C*
Sanders, B. E., 3J20
Sanders, C. I., 2A1*C*
Sanders, R. W., 4D7
Sanders, T. W., 6B216
Sandescu, F., 3H15
Sandhu, S. S., 1C45
Sandler, M., 6D43
Sandler, S., 2D61
Sandra, P., 2A6*C*, 3F35

Sanemasa, I., 4B56
Sanevich, F. P., 1C33
Sangermano, L., 5A5*C*
Sankar Das, M., 2J150
Sano, H., 3F20
Sansone, E. B., 1J98
Sant, B. R., 3B2
Santa Ana V., M.A., 2B86
Santafe, C., 5A6*C*
Santi, W., 1E30, 4E32
Santiago, M. A., 2A4*C*
Santini, R. E., 2A7*C*
Sanyal, G. S., 3B143
Sanyal, M., 5F18
Sanz, M. D., 4B138
Saotome, T., 3E27
Sapozhnikov, Yu. M., 4D80
Sapozhnikova, E. Ya., 5B68
Sapp, E., 5J39
Saraswathy, K. M., 3H5
Sarc-Lahodny, O., 5A6*C*
Saris, N.-E., 4A1*C*
Sarkisyan, A. A., 4B29
Sarquis, J. L., 2A5*C*
Sarwar, M., 6F29
Sas, M., 2E51
Sasaki, Hirokazu, 3D42
Sasaki, Hirooki, 6B197
Sasaki, M., 1D72
Sasaki, Sakae, 1B62
Sasaki, Shozo, 2D9
Sass, S., 2C23
Sastri, V. S., 2A13
Sastry, C. K., 1A5
Satanovskii, L. M., 6B92
Satarina, G. I., 1B37
Sato, A., 4H18
Sato, K., 3B155
Sato, Taichi, 1B93
Sato, Takashi, 5J112
Satyanarayana, K., 1B160
Sauer, H., 5F28
Sauer, K.-H., 1B157
Sauer, W., 1C78
Saugstad, O. D., 3D113
Savage, D. J., 6B104
Savariar, C. P., 1B133
Savenko, G. I., 1B33, 3B41, 6B128
Savenkova, V. V., 5C49
Savici, L., 3B59
Savin, V. I., 6C49
Savinova, V. V., 1C32
Savitskaya, E. M., 2E18
Savitskaya, T. S., 1C73
Savory, J., 6D11
Savoy, C. F., 5F3
Savvin, S. B., 2B113, 5B61
Savvina, L. P., 2B18, 2B118
Sawada, H., 3E38
Sawatzky, H., 2A4*C*
Sawicki, C. R., 3C93*B*
Sawicki, E., 1H14, 2A1*C*, 3C93*B*, 3H13, 5A1*C*
Saxby, M. J., 1F2, 1F3
Sayeh, B. M., 1B7
Sayers, M. H. P., 5A3*C*
Saylor, C. P., 2J120
Sbrana, G., 6C8
Scacchi, G., 6C14
Scales, B., 1D26
Scanes, S., 3D21
Scarano, E., 2H28
Scariah, K. J., 3B167
Scasnar, V., 3C55
Schacter, B. A., 1D94
Schaefer, B. A., 3J46
Schaefer, H., 1D49, 2B100, 2B116
Schafer, M. L., 5F13
Schalkwijk, P. C., 4B35, 4J4
Schall, E. D., 2G16
Schatzki, T. F., 3C41
Schauer, R., 6D59
Scheler, F., 2D24
Scheller, F., 2E12
Schelske, C. L., 2A4*C*
Schermuly, E., 2D133
Scherr, F., 5D57, 6D49
Scheubeck, E., 3B28
Schieke, J. D., 2J34, 6A1*C*, 6J20
Schiffel, B., 4F12
Schiller, W., 6C84
Schilling, G., 3E25
Schilt, A. A., 5A10
Schindlbauer, H., 4C80
Schiweck, H., 5G12
Schlageter, N., 3D111
Schleifer, A., 6J5
Schleiffer, E., 3F34
Schlenk, H., 5D50
Schlichenmaier, V., 5A6*C*
Schlunegger, U. P., 5J77
Schmelzer, W., 6A2*C*
Schmermund, J. D., 4J11
Schmid, E. R., 2G34, 6B1
Schmid, H. H. O., 5D52
Schmid, W. J., 4J53
Schmidhuber, V., 5J19
Schmidiger, O., 1E22
Schmidt, C. E., 2A7*C*
Schmidt, C. T., 1A1*C*
Schmidt, D. E., 2D92
Schmidt, F. J., 3B18
Schmidt, H.-J., 2E12
Schmidt, M., 6D68
Schmidt, R. J., 1D48
Schmidt, R. V., 2A4*C*
Schmidt, S. P., 2D57
Schmitt, J. C., 2B58
Schmitt, W., 2E8
Schmitz, K.-H., 6B208
Schmitz, L., 4B142
Schnabel, G., 6E8
Schneider, F., 5F17
Schneider, G., 2G19
Schneider, Z., 5D103
Schnell, E., 1J25
Schneppe, M. M., 5B120
Schnute, W. C., jun., 1D81
Schobben, F., 2D41
Schoch, F., 2J108
Schoch, P., 5B80
Schock, H. H., 2B163*B*
Schoeller, F., 6H33
Schoenfeld, T., 5J106
Schoenherr, S., 3B121
Scholfield, C. R., 3F48
Scholler, R., 3D78, 4D49
Schomburg, G., 2A6*C*, 6A1*C*, 6C17
Schooley, D. A., 3G49
Schotterer, U., 2H23
Schrader, B., 2C2
Schreiber, B., 2B14
Schreiber, U., 1J41
Schroeder, C. H., 5A1*C*
Schroeder, E., 5C57
Schroeder, G., 4G30
Schroeder, I., 4E41
Schroeder, U., 2A6*C*
Schroen, W., 1J37
Schrot, J. R., 5H45
Schubert, H., 6J76
Schueller, M., 6C41
Schuknecht, B., 3B36
Schuldt, U., 5F19
Schulman, S. G., 2E35, 2E44, 6E34
Schulte, H. F., 3B86
Schulten, H.-R., 1J61, 3B8
Schultz, B. W., 5C61
Schulz, J.-P., 5A6*C*
Schulz, L., 2J13
Schulz, P., 3C16, 4C51
Schulze, J., 2A1*C*
Schumaker, K. D., 1J29
Schurig, H., 3B56
Schuster, D. G., 5B116
Schuster, F., 6J45
Schuster, J., 5A5*C*
Schwartz, G. A., 4C2
Schwartz, R. D., 6A1*C*
Schwarzmaier, U., 4E19, 6E9
Schweden, W., 1J14
Schwedt, G., 1E8, 3D89
Schweikert, E. A., 5A5*C*
Schweppe, H., 4C67
Schwertner, H., 6D17
Schwing, J.-P., 3B129
Sciarra, J. J., 1D31
Scodigor, C., 4B130
Scoggins, M. W., 4C36
Scott, A. C., 5H17
Scott, C. D., 5A2*C*
Scott, D. R., 2A7*C*
Scott, K. F., 6A1*C*
Scott, K. N., 2A1*C*
Scott, R. H., 2A1*C*
Scott, R. O., 5D1
Scott, R. P. W., 3J9, 6A1*C*
Scott, R. S., 1J3
Scott, T. G., 6H35
Scratchley, G. A., 6E37
Scriban, R., 6F27
Scribner, B. H., 6A3*C*
Seaby, D., 2J26
Seago, J. L., 3A1*C*
Seals, R. G., 5F3
Seamark, R. F., 5D46
Sebestyen, Z., 1J6
Sebor, G., 3C45
Seda, J., 1J26
Sedlet, J., 1A1*C*
Sedman, A. J., 3D51
Seeger, M., 4C78
Seet, A.-M., 1D90, 5D94
Segawa, T., 4G19, 4G20
Segebarth, C., 5J69
Seiber, J. N., 6G9
Seidel, R., 4E2
Seidemann, J., 2F25
Seidenberger, J. W., 3D90
Seidman, D. N., 2J65
Seifert, D., 5A3*C*
Seifert, J., 1G18
Seiffert, I., 2G13
Seiler, D. G., 2J47
Seiler, T., 1J53
Seim, H. J., 3H14
Seina, Z. N., 1C33
Seitzinger, R. W. T., 5E33
Seki, T., 6D55
Sekiguchi, T., 3C67
Sekine, T., 4B40

blegny, E., 2B148
blezneva, E. A., 1B136
blfridge, N., 5D14
blig, W., 1J69, 6B145, 6B147, 6B160
bllier, N., 3C78, 5D40
blling, H. A., 5G28
bllschop, J. P. F., 5B116
blvage, N., 6D48
blvin, S., 1H22
bm, G. J., 3A1*C*
bmbdner, G., 2G19
bmendyaev, K. A., 5A6*C*
bmendyaeva, N. K., 5A6*C*
bmeniuk, G. M., 3H13, 5A1*C*
bmenov, V. A., 6A6
bment, E. G., 5C20
bmrad, E. E., 5B159
bn, A. R., 5F46
bnent, F., 1H5
bngl, E. D., 2B24
bnguen, F. I., 4D19
bn Gupta, A. K., 1F22
bngupta, P., 5F46
beno, S., 1J9
benoo, M., 5B174
bensmeier, M. R., 5H21
benyavin, M. M., 5H32
beoane, E., 1D47
beppala, E., 3C72
bequerra-Amram, S., 2D129
berbanescu, A., 4B52, 4B53, 6C65
berfontein, W. J., 6D15, 6D16
berravallo, F. A., 6J27
bervant, J.-M., 4J38
bervyanova, S. E., 1C43
beryakova, I. V., 2B3
berykh, N. V., 4B42
bestak, J., 5A6*C*
betchell, R. E., 3B25
bethi, P. D., 2E32
betnikar, I., 5D29
bettle, D. A., 4E40
betton, R., 2B74
bevcik, J., 5J31
bevdic, D., 2B37
beverijnen, M., 2G17
beverin, M., 3F41
beverson, R. F., 2D74
beves, A., 3C75
beybold, P. G., 2J119
beyden, J., 4C41
bhabana, R., 1B76, 6B97
bhabanowitz, J., 1E48
bhade, J. T., 1E44
bhafouh, I. M. A., 5B207
bhah, B. N., 6B65
bhah, K. J., 3B113
bhah, K. R., 3B170
bhah, S. K., 3F30
bhahine, S. A., 2B11, 3B46
bhainkin, R., 1D67
bhakhova, N. V., 4B13, 5B190
bhakhtakhtinskaya, N. G., 4B57
bhakirov, T. T., 3G27
bhakirova, A. M., 3C6
bhakirova, P. A., 1B55, 1B97
bhakunthala, R., 4A14
bhamaev, V. I., 2B87, 5B145, 6B127
bhanbhag, P. M., 3B141
bhand, J. H., 4D9
bhanfeld, J., 1D86
bhannon, G. M., 2F21
Shapiro, A. G., 2B80
Shapiro, I., 1D86
Shapiro, I. L., 3D90
Shapiro, S. I., 3J5*P*
Shapiro, Ya. N., 5B141
Shapkina, Yu. S., 5B34
Shaposhnikova, E. Yu., 4H7
Shaposhnikova, G. N., 2B39, 4B29, 6B175
Sharapov, I. S., 1B142
Sharkey, A. G., jun., 2A7*C*
Sharma, D. C., 2J4
Sharma, J. K. N., 2J4
Sharma, J. P., 4C48
Sharma, Krishna D., 4B9
Sharma, Krishnan D., 1C45
Sharma, O. P., 3B159
Sharma, P. D., 4B91, 5E27
Sharma, S., 1B139
Sharma, T. P., 4B116
Sharma, Y., 1B108, 6B156
Sharman, D. F., 2D40, 3D98
Sharp, B. L., 2J88
Sharp, J. H., 5A6*C*
Sharpe, M. R., 6J59
Shatrova, V. M., 3E22
Shaulina, L. P., 5B93
Shaw, F., 2B10
Shaw, M. A., 5J80
Shchekaleva, P. N., 6B37
Shchel'tsyn, V. K., 4C40
Shchemeleva, G. G., 6B96
Shcherbakova, K. D., 3C14
Shcherbakova, O. I., 6B116
Shcherbov, D. P., 2B102
She, C. Y., 1J107
Shea, T. E., 6A3*C*
Sheehan, J. E., 2J127
Sheehan, W. E., 1A1*C*
Sheer, M. L., 2A1*C*
Shefer, S., 4D45
Sheina, N. M., 6B180
Sheinson, R. S., 2J80
Shekhar, C., 3B35, 5B4
Shelikhina, E. I., 2B17
Shelley, P. E., 5A4*C*
Shelpakova, I. R., 6B116
Shelton, B. J., 6B101
Shelton, D. R., 3B133
Shen, T. T., 5H10
Shenai, V. A., 5C48
Shepard, R. L., 4J37
Shepherd, A. M. M., 3D25
Sheppard, A. J., 4F38, 5F69
Sheppard, E. P., 4C64
Sheppard, G., 4D82
Sheppard, N., 6B32
Sherbon, J. W., 2F28, 2F29
Sherma, J., 2G21
Sherwood Medical Industries Inc., 3J4*P*
Shestakov, V. A., 5J42
Shesterova, I. P., 4B95, 5B36
Shestidesyatnaya, N. L., 1B32, 3B44, 4B94, 6B40
Shevaldina, I. M., 3B68
Shevchenko, I. G., 4B129
Shevchenko, L. D., 6B59
Shevchenko, P. F., 4H7
Shevchenko, T. L., 6B190
Shevchuk, I. A., 2B62, 4B97, 4C31, 5D70
Shevko, V. A., 5B199
Shevtsov, N. I., 4B140
Shevtsova, L. I., 5B194
Shibata, N., 1B63
Shibata, S., 2D9, 4B153
Shida, J., 6B172
Shigematsu, T., 1H35
Shigetomi, Y., 6H50
Shiho, D., 1C25
Shijo, Y., 1J73, 5B186
Shikheeva, I. A., 1B165
Shilina, G. V., 6B220
Shimanskaya, N. P., 1C52
Shimida, T., 2H10
Shimizu, R., 3B149
Shimoishi, Y., 4B150, 5B46
Shimokawa, S., 2G6
Shimomura, S., 3D23
Shinde, V. M., 2B40
Shingbal, D. M., 3E32
Shinkareva, N. A., 5B117
Shinozuka, T., 2F39, 3F15
Shipitsin, S. A., 6B46
Shiraishi, N., 4B127
Shiraishi, Y., 2C62
Shiraiwa, T., 6C25
Shirsat, P. D., 3E32, 3E43
Shiryaev, B. V., 1C71
Shiryaev, P. A., 5B74
Shishkin, E. A., 5A6*C*
Shishkov, A. N., 2B153, 3D116
Shishmanov, P. S., 3E34
Shitareva, G. G., 4B123, 6B166
Shiu, W. Y., 2A4*C*
Shivahare, G. C., 1B107, 1B108, 3B116, 6B156
Shkolina, L. A., 3C50, 4J26
Shlyakhov, A. F., 5C42
Shlyakhter, R. A., 6C94
Shmonin, L. I., 5B149
Shohet, J. S., 1E46
Shoniya, N. I., 3D6, 5G1
Shoolery, J. N., 2A1*C*
Short, M. A., 2B56
Shotton, E., 4E35
Shotwell, O. L., 2F21
Shpak, E. A., 2C43, 4B78, 4B147, 5B126, 5H24, 6B14
Shpirt, M. Ya., 2B61
Shrenk, W. G., 4J60*B*
Shroff, A. P., 3D38, 3E44
Shubiak, P., 5F59
Shukla, S. K., 6B185
Shukla, V. K., 1B68
Shukla, V. K. S., 4C48
Shul'ga, N. I., 4C17
Shul'gach, T. S., 6B209
Shulgaitser, L. A., 1C34
Shulman, J. I., 6C52
Shulman, R. S., 4B160
Shults, M. C., 2J137
Shultz, J. L., 2A7*C*
Shuman, H., 2J128
Shur, N. G., 5H14
Shurova, L. M., 4B59
Shvangiradze, R. R., 1B14
Shvedova, L. V., 2B38
Shveikina, R. V., 2B126
Shvyrkova, L. A., 5C17
Shykles, M., 1C16
Sian Oey, L., 5C60
Sichkar', G. A., 5B145
Siddall, J. B., 3G49
Siddiqui, I. R., 4F13, 6C20
Sidhu, J. S., 5G38
Sidorenko, V. I., 3J81

Sidorov, R. I., 3C7, 5H16
Sidorov, V. A., 5B141
Siebert, K. J., 4A3*C*
Siefert, K., 2E40
Siegenthaler, U., 2H23, 6F11
Siegrist, M. R., 5J9
Siekmann, L., 2A3*C*
Siemens Akt.-Ges., 3H3*P*
Siemer, D. D., 2A1*C*, 3H9
Sierra Jimenez, F., 4B14, 4B133, 4B138
Siesmayer, B., 6C92
Sieswerda, G. B., 4J12
Sievers, A. J., 1J52
Sievers, R. E., 2A1*C*, 6A1*C*
Sievertsson, H., 2D111
Siewierski, M., 6H23
Sigel, C. W., 1D27
Siggia, S., 2A1*C*
Siirde, A., 6H14
Siiteri, P. K., 1D54
Sikharulidze, G. G., 3B29
Sikorska-Tomicka, H., 5B202
Silaeva, I. A., 3J43
Silano, V., 5D101
Silberman, H., 2E40
Silipo, C., 5E22
Silk, D. B. A., 4D58
Sill, C. W., 1A1*C*
Silver, J., 2D113
Silvester, R., 1H18
Silvestri, S., 5E46
Simek, M., 6B63
Simmons, H. P., 3E28
Simmons, W. J., 6G3
Simon, F. O., 1G8
Simon, R., 3H49
Simon, S. J., 5B22
Simon, W., 5J91
Simonaitis, R. A., 4G39
Simoncsits, A., 2D136
Simoneit, B. R. T., 3C92
Simonenko, V. I., 4B79, 4B82
Simonescu, T., 4H6
Simonova, L. V., 1B166
Simonova, T. N., 4B97
Simonyi, I., 1E29, 2C37
Simpson, J., 2B19
Sims, A. P., 1D66
Sims, H. F., 4D66
Sims, R., 3A14*B*
Sinaiskii, U. M., 3B147
Singer, R., 2D123
Singh, A. K., 1A6
Singh, Anil Kumar, 5B129
Singh, B. R., 4D13
Singh, D., 1B139
Singh, E., 1A7, 3B132
Singh, E. J., 2D70, 3D69, 6D45
Singh, H., 6E36
Singh, H. B., 1H8
Singh, J., 5B40
Singh, O. V., 5B83
Singh, R. P., 1A6, 1B158, 1B161, 1B173
Singh, S., 3D128
Singhal, R. K., 1A3
Sinha, B. C., 4B172
Sinha, B. P., 3C46
Sinha, O. K., 3G25
Sinitsyna, L. A., 1C31
Sinsel, J. A., 6C67
Sioufi, A., 4D27
Sippell, W. G., 1D58
Sir, Z., 1C15
Siroki, M., 4C42, 5C24
Sirokman, F., 6C51
Siska, E., 2F2
Sisson, R. D., 2J127
Sistek, F., 5E48
Sitaram, R., 6B142
Sites, J. R., 2A7*C*
Sivasubramaniam, S., 4G3
Siwon, H., 3C66
Sixta, V., 3B81, 3B82
Sizgoric, S., 2A4*C*
Sizova, G. S., 6C39
Sjoeberg, N.-O., 6D50
Sjoedin, B., 5D88, 6A2*C*
Sjoestroem, E., 3C72
Sjoevall, J., 2A3*C*
Skaare, J. U., 4G17, 5G20
Skakun, N. A., 2B89, 4B42
Skellern, G. G., 6D23
Skiles, D. W., 2A1*C*
Skinner, R. F., 1D63
Sklarz, B., 5D61
Skogerboe, R. K., 2A1*C*
Skorbo-Trybula, Z., 1B59, 2C21, 6B77
Skorobogatyi, Ya. P., 5B30
Skov, H. J., 5J98
Skripkin, G. S., 1B64
Skudaev, Yu. D., 6B46
Slabodenyuk, I. V., 5B42
Slade, P., 5G24
Slagman, J., 5F4
Slater, A., 1H19
Slater, D. H., 4H14
Slavin, S., 5F5
Slawinska, D., 6H43
Slawinski, J., 6H43
Sleeman, D. H., 2J106
Slepushkin, V. V., 3B55
Slickers, K., 2B58
Slobodenyuk, T. A., 6B9
Slocum, S. A., 4D46
Slodzian, G., 5J82
Slotvinskii-Sidak, N. P., 3B115
Slowik, A., 6C12
Slutskin, M. A., 5B66
Slyusarchuk, V. T., 6C55
Slyusareva, R. L., 1B65
Smagunova, A. N., 3J56, 5J42
Smakhtin, L. A., 2H17, 3B147
Small, H., 5J17
Smeets, J., 5A3*C*
Smiley, G. T., 2A4*C*
Smirnaya, V. S., 4B157
Smirnov, A. N., 4B100, 5B198
Smirnov, A. Yu., 1B49, 2B31
Smirnov, R. P., 5D81
Smirnov, V. Ya., 3B9
Smit, H. C., 2J41, 6J56
Smit, H. J., 3D21
Smith, A., 5D48
Smith, A. G., 6A1*C*
Smith, A. L., 6J62
Smith, A. L. S., 4J34
Smith, A. P., 2E49, 4E36
Smith, B. J., 2J125
Smith, C. H., 2D60
Smith, C. J., 6B118
Smith, D. B., 6A3*C*
Smith, D. G. W., 2J67
Smith, David H., 5A5*C*
Smith, Dennis H., 2A20
Smith, D. R., 1J51
Smith, D. W., 4E11
Smith, E., 4C7
Smith, E. B., 2A1*C*
Smith, G., 1C68
Smith, G. R., 3G9
Smith, G. W., 3C40
Smith, H. M., 5B31
Smith, J., 4F4
Smith, J. A., 2D57
Smith, J. W., 4C55
Smith, L. C., 1J103*P*
Smith, M. D., 2D47
Smith, P. B., 2J70
Smith, R. A., 4D70
Smith, R. L., 2D117
Smith, R. V., 3D29, 3D41
Smith, S. B., jun., 2A1*C*
Smith, S. J., 3E30, 4E33
Smith, S. R., 6J63
Smith, S. W., 3D61
Smith, T. J., 5A5*C*
Smith, T. N., 1H1
Smyth, W. F., 1E35, 3C25
Smythe, L. E., 1A2, 4B119, 5D2
Snamprogetti S.p.A., 3D1*P*
Snedden, W., 1J27
Snezhnova, L. P., 3E22
Snook, M., 4J6
Snook, M. E., 2D74
Snooks, E. C., 2A1*C*
Snow, E. H., 2A7*C*
Snowden, C. J., 2F35
Snyder, L. R., 2A1*C*
Soar, J. B., 4G10
Sobkowska, A., 2B140
Soboleva, N. N., 6C76
Sobolevskii, M. V., 6C90
Sobotka, V., 4J2
Society of Chemical Industry, 6A24*B*
Soczewinski, E., 1C50, 1C51, 4C22
Sodek, L., 5G5
Soederhjelm, P., 5F71
Soedigdo, S., 3C36
Soelling, H., 5D38
Sogani, N. C., 1A3
Soini, E., 2A3*C*, 2J145
Sokolowska, J., 5C58
Sokolowska, W., 1B60
Sokolowska-Muszynska, M., 2D107
Solanke, K. R., 2B128
Soldano, B. A., 1B52
Solecki, A., 4D44
Soler, J., 2B93
Soleymanloo, S., 1B156
Solheim, S., 4A1*C*
Soliman, S. A., 4E38
Solomatin, V. T., 2B120
Solomon, B. S., 2J36
Solomon, H. M., 3D35
Solomon, R. A., 1H17
Solov'ev, E. A., 2B18, 2B118
Solsky, J. F., 6A1*C*
Solyanik, S. K., 6B61
Solymar, K., 5A6*C*
Someno, K., 2J109
Somer, H., 2D152
Somers, P. J., 6C21, 6C23
Somers, R. M., 1J43
Sommer, K. R., 5A2*C*, 6A1*C*
Sommers, L. E., 3H38, 5G6
Sonanini, D., 5F63
Songina, O. A., 5B177, 6B226

Sontag, G., 6H33
Sorantin, H., 6B239*B*
Soraya, B., 2B21
Sorge, J., 1J32
Sorimachi, K., 2D109
Sorio, A., 1H28, 5H20
Sorochinskaya, V. F., 4B115
Soros, V. I., 6B184
Sosnovskaya, E. V., 6B21
Sotera, J. J., 2A1*C*
Sotnikov, E. E., 3D50
Sotolongo, M. A., 4E8
Sotorres, A. M., 3D55
Sotsenko, N. K., 6C43
Souka, N., 6B189
Sourek, R., 6F4
Souter, R. W., 1E39, 5D65, 6E28
Southern, D. L., 2J11
Southwell, R. L., 4B48
Soviar, K., 6E24
Sparrow, T. G., 2J124
Spasic, S., 5D93
Spaziani, F. F., 3A1*C*
Spear, R. C., 1H22
Specht, S., 3J18
Specker, H., 3B123
Speecke, A., 4D6
Spencer, L. E., 3E41, 4C25
Speranskaya, G. P., 5B137
Sperling, K.-R., 5D9
Speth, R. C., 2D92
Spevackova, V., 5B104
Spiehler, V. R., 3E14
Spilles, C., 5C6
Spinner, E., 1C66, 4C69
Spiridonova, I. M., 6B205
Spitsyn, P. K., 3B152
Spitz, H. B., 1A1*C*
Spitzer, C., 2A1*C*
Spitznagle, L. A., 4C66
Spitzy, H., 1C2, 6B64
Spohr, R., 2J75
Sporykhina, V. S., 6C88
Spraberry, M. N., 2A2*C*
Spraktes, F. W., 2A7*C*
Springer, G., 3J68
Spritzer, M. S., 2A1*C*
Sprys, J. W., 1J34
Spryskov, A. A., 5C36, 5C37
Srinivasan, M., 3C10, 3H35
Srivastava, A., 1C13, 1C14, 2B73
Srivastava, D. N., 3E18
Srivastava, K. C., 6B174
Srivastava, S. P., 2C35, 4C35
Stafford, M., 6A1*C*
Stahl, E., 1J15, 2C14, 2C74, 2E8, 5C60, 5E2
Stahlhut-Klipp, H., 5F30
Staiger, D. B., 1E47, 2C48, 4E23
Staikov, A. I., 6B155
Stallard, D. E., 5G36
Stamatov, S. D., 3D116
Stancher, B., 1C63, 4C57
Stancil, F. E., jun., 5H23
Stanczyk, F. Z., 2A3*C*
Stanley, J. B., 1F8
Stanley, P. E., 3D112
Stanley-Wood, N. G., 1J93
Stanton, R. E., 3B163
Staples, B. R., 2A1*C*
Starcke, F., 4A1*C*
Starke, K., 6J39
Starling, M., 3A1*C*
Staroscik, J., 1D29
Starostina, N. G., 3C8
Stathakos, D., 6A2*C*
Stavinoha, L. L., 3C51
Stavropoulos, W. S., 3D56*P*
Stazione Sperimentale per le Industrie degli Oli e dei Grassi, 2F43, 5F60
Steele, T. W., 5B209
Stefanac, Z., 5D8
Stefaniga, E., 3J83
Steffan, I., 2H27, 6B100
Steger, F., 5J106
Steger, H. F., 1B88, 2B81
Stein, S., 2D116
Stein, T. P., 1D14
Steiner, K., 3F33
Steiner, P. R., 6C70
Steinfeld, J. I., 6J33
Steingaszner, P., 3C47
Steinke, J., 4C75
Steinle, G., 5G12
Steinnes, E., 1B75, 2H5, 2H16, 3D11, 4D5, 4D13, 6G4
Stejaru, D., 2C58
Stejskal, M., 6C63
Stella, R., 5A5*C*
Stemberova, A., 1E1
Stennert, M., 2D24
Stenroos, L. E., 4A3*C*
Stepak, R., 1B41
Stepanenko, V. E., 1B20, 5H33
Stepanenko, Yu. V., 6B96
Stepanov, E. N., 4H7
Stephan, H., 6B181
Stephen, J., 2J125
Stephens, B. G., 3B34
Stephens, F. B., 5B105
Stephens, R., 3J63
Stepin, V. V., 1B141
Sternson, L. A., 2D147
Steurbaut, W., 2G23
Stevens, D. J., 2J3
Stevens, M. R., 5E12
Stevens, R. E., 3A5
Stevens, R. K., 2H4
Stevens, T. S., 5J17
Stevenson, J. N., 2B71
Stewart, G. H., 3J25
Stewart, J. L. S., 5A5*C*
Stewart, J. T., 2E49, 4E36, 4E40, 5D25
Stewart, J. W. B., 5G2
Stewart, M. C., 3J65*P*
Stewart, M. J., 3D39
Steyn, J. M., 4D15
Steyn, M., 4J5
Steytler, J. G., 2D142
Stiff, M. J., 1H29
Stijve, T., 2F5
Stillwell, R. N., 3G37, 6A1*C*, 6J66
Stirrup, J. E., 1G11
Stivala, S. S., 5C53
Stoch, L., 5A6*C*
Stoch, Z., 5A6*C*
Stock, J. J., 5A5*C*
Stocklinski, A. W., 3D29
Stoffel, R., 2E3
Stognushko, D. P., 6C34
Stohs, S. J., 6E37
Stoian, G., 3H11
Stoilkov, G., 6C79
Stojadinovic, L., 1J1
Stojanovic, D., 5B95
Stokbro, W., 1J74
Stokes, G. B., 5D53
Stokes, J. A., 3H1
Stokes, P. M., 2A4*C*
Stokesberry, D. P., 2J7
Stoklosa, H. J., 5J11
Stoklosa, J. T., 5D78
Stollsteimer, J., 6C61
Stone, J., 2D116
Stone, J. P., 4H2
Stone, R. W., 3H9
Stonham, T. J., 5J80
Stopp, I., 1C44
Storm, A. R., 2J58
Storrs, E. E., 3G39
Strack, C., 5F16
Strack, D., 2D131
Strafelda, F., 1B77
Straka, P., 2C39
Stransky, K., 3D68
Stransky, Z., 3A7
Strashinskii, A. G., 4B42
Strassner, M., 3E24
Strausz, K. I., 6D7, 6D13
Strausz, O. P., 6D7, 6D13
Strazza, G. G., 4B155
Street, H. V., 2D34
Streibl, M., 3D68
Strele, W., 1J25
Strelko, V. V., 5H38
Strelow, F. W. E., IB2, 1B3, 6B53, 6B134
Stringham, W. S., 5B26
Strippel, G., 5C6
Stroemberg, L., 2E50
Stroemme, J. H., 4A1*C*
Stroganov, A. I., 1B145
Strohal, P., 6H52
Strojek, J. W., 2J92
Strojny, N., 2A1*C*
Stromberg, A. G., 3B10
Strong, J. M., 3J47
Strong, W. M., 2J20
Strosher, M. T., 2A4*C*
Strubert, W., 2J14
Strukova, M. P., 3C2
Stuart, J. L., 4B92, 5B139, 5B140
Stubits, P. K., 6H11
Studebaker, J. F., 4D46
Stuehr, J. E., 6A16
Stuenenberg, H., 6F14
Stuik, E. J., 1D7
Stulik, K., 6F4
Stump, I. G., 1D5
Stumpf, P. K., 5D53
Sturgeon, R. E., 2J89, 2J90
Sturner, W. Q., 5D16
Sturrock, P. E., 1J75, 5B76
Sturtevant, J. M., 2A1*C*
Stuthe, W., 5E43
Stux, R. L., 2A1*C*
Styskin, E. L., 1J20
Su, K. L, 5D52
Su, Y.-S., 6B117
Suatoni, J. C., 3C48, 3C49
Subbarao, R., 1C64, 2C66
Subbotin, A. A., 5C22
Subert, J., 1E1, 2E29, 5E48
Subrahmanyam, B., 3B103
Subramanian, N., 6C42
Sucha, L., 6B240*B*
Suchkov, A. I., 5B8
Suddueth, J. E., 3D24
Sudilovsky, O., 3J21
Sudo, E., 4B144

Sudo, K., 2C16, 2D59
Sudoh, G., 2B98
Sudol, R. S., 2A1*C*
Suffet, I. H., 2A4*C*, 5A4*C*
Sugar, J. W., 5A4*C*
Sugawara, K. F., 6B117
Sugawara, M., 4B26, 4C58
Sugaya, I., 3B110
Sugden, B., 4J16
Sugden, K., 2F15
Sugii, A., 4B134
Sugimae, A., 3H6, 4H4
Sugiura, M., 2D77
Sugiura, T., 3D87
Sugiyama, T., 4C20
Suhara, K., 5D76
Suketa, Y., 2D23, 2G6
Sukhan, V. V., 2B22, 4B154
Sukhareva, Z. I., 6C18
Sukhorukov, B. L., 3J56
Sukhoverkhov, V. F., 3B131
Sulcek, Z., 3B81, 3B82
Suleimanova, M. G., 6B220
Sullivan, H. R., 4D24
Sumenkova, M. F., 5B146
Sun, P.-J., 6A8
Sunas, E. C., 2A1*C*
Sundberg, L. L., 6B48
Sundby, B., 2A4*C*
Sunjic, V., 2E37
Sunshine, I., 4D21
Supatashvili, G. D., 6H32
Surin, I. G., 3B152
Surles, T., 1J47
Susi, H., 2A1*C*
Suszka, B., 6D37
Sutarno, R., 3B169
Sutherland, J. K., 5C46
Sutherland, R. G., 5G27
Suttkus, B., 6B159
Suzuki, F., 2H14
Suzuki, J., 4B93
Suzuki, Masami, 2B117
Suzuki, Masao, 2B15
Suzuki, N., 2B149, 3B22
Suzuki, Shigetaka, 1H43
Suzuki, Shin, 1B80, 3B17
Svec, P., 5C11
Svehla, G., 2C28, 3C27, 6A22*B*
Svendsen, A. B., 2E9, 5E6
Svensson, L., 1D34, 1D57
Sviridenko, V. G., 4F2, 6B50
Svoboda, H., 5A6*C*
Svoboda, V., 2J69
Svobodova, D., 6C44
Swab, R. E., 3C48
Swanson, M. J., 3J20
Swanson, V. E., 6A3*C*
Swarin, S. J., 2A1*C*, 5C59
Sweeley, C. C., 2A1*C*
Sweet, D. V., 1A1*C*
Sweetman, B. J., 2D71
Sweetsur, A. W. M., 2G10
Sweger, D. M., 1H16
Swennen, L., 3J86
Swensson, E. E., 3D4
Swiatecka, M., 6C89
Swidzinska, K., 2E24
Swift, C. E., 5F24
Swift, P., 6J40
Swingle, R. S., II, 6J43
Sybrandi, J. C., 3H25
Sychra, V., 1B95, 3C45
Sydenham, P. H., 2J55
Syers, J. K., 5H27
Sykes, B. D., 5J65
Syoyama, M., 3G38
Syrowatka, T., 3D88
Szabo, A., 5F53
Szabo, M., 6C51
Szabo, Z. G., 6C50
Szafranski, A., 5A6*C*
Szalkowski, M. B., 5G36
Szasz, G., 2E46, 2E56
Szaufer, M., 2E10
Szczepaniec-Cieciak, E., 5J26
Szczesniak, L., 2E22
Szekeres, L., 2E30
Szendrei, G., 5A6*C*
Szepesi, G., 4E42
Szepesy, L., 1J6
Szeri, L. S., 1J2
Szirtes, L., 5A6*C*
Szivos, K., 2D6
Szokolay, A., 2G27
Szonntagh, E. L., 3A1*C*
Szoplik, J., 1B155
Sztankai, G., 3C85
Sztark, W., 2G24
Sztatisz, J., 5A6*C*
Szwajca, T., 1E25
Szymczak, J., 4C72
Szyszko, E., 2E2

Taaffe, W. P., 2D110
Tabatabai, M. A., 3G11
Tabock, J., 2A1*C*, 2B56
Tachikawa, N., 5B174
Tadera, K., 3D117
Tadros, N., 3B70
Tagami, S., 1C25
Taglauer, E., 6J45
Taguchi, I., 1B147
Taha, A., 4E14
Tai, H., 3G23
Tai, M. H., 5J64
Tai, P. T., 4F27
Tait, A. M., 3J69
Takabatake, E., 2C62
Takacsy, T. E., 5E24
Takahagi, H., 1J9
Takahashi, K., 6B188
Takahashi, M., 1D46
Takahashi, N., 2D106
Takahashi, Y., 1H24, 3H18, 4H20
Takamatsu, K., 2H30
Takamura, K., 2B42, 2E26, 6E19
Takata, Y., 1J11, 3H32, 6B8
Takeda, I., 6J30
Takeda, M., 5G34
Takeda, T., 3D126
Takemori, S., 5D76
Takeshita, R., 3H43
Takeuchi, T., 3C39
Takeva, S. I., 5C40
Takitani, S., 2B15
Takiura, K., 2C16, 2D59, 2D140, 4C16
Talanov, N. D., 5B137
Talas, E., 4C89
Talipov, Sh. T., 1B46, 1B55, 1B61, 1B97, 2B132, 4B95, 4B98, 5B10, 5B36, 6B151
Talipova, L. L., 1B134
Talmi, Y., 2A1*C*, 2J49, 2J50, 3D18, 3D19, 6G7
Talts, A., 5A4*C*
Tamarchenko, L. M., 2B131
Tamba, M. G. Del M., 4B146
Tamhina, B., 1B122, 2B104, 4B101
Tamura, H., 2J111, 3B149
Tamura, T., 2D81
Tamura, Z., 1D100, 2B112, 3D45, 6D44
Tan, F. C., 2A4*C*
Tan, H. S. I., 2E36
Tan, I.-K., 2A14, 2D146
Tanabe, S., 3C23
Tanaka, A., 4H9
Tanaka, Hideki, 1H26
Tanaka, Hironori, 2C65
Tanaka, I., 3B155
Tanaka, Katsu, 4B38
Tanaka, Katuhiko, 2F3
Tanaka, Kazuko, 6F9
Tanaka, Kiriko, 6B170
Tanaka, Kunio, 3C67
Tanaka, S., 4C44, 4C63, 6C66
Tanaka, Takashi, 2H40, 3B12
Tanaka, Tatsuhiko, 4B62
Tanaka, Toshiyuki, 2H21
Tananaiko, M. M., 5B69, 6B70
Tandeski, E. V., 2C51
Tandon, S. G., 1B13
Tandon, S. R., 5B83
Taneeva, G. V., 3B164
Tang, S., 2A1*C*, 3C52
Tani, M., 4J14
Tanielian, C., 3F34
Taniguchi, H., 1B27, 2E52
Tanikawa, S., 4B127
Tanner, J. T., 1J86, 6A3*C*
Tantsyrev, G. D., 2J32
Tanturli, G., 1C35, 2C34
Taphorn, J. E., III, 2C31
Taraborelli, J. A., 3C64
Taradai, E. P., 1J20
Tarantino, M., 3D99
Tarasov, V. V., 5H15
Tarasova, V. A., 5B123
Tarasyants, R. R., 6B23
Taraszewska, J., 5C33
Tarayan, V. M., 2B39, 4B29, 4B136, 6B191
Tarrant, K. A., 5J24
Tarulli, S. H., 3B40
Tasaka, M., 6F23
Tasca-Danescu, A., 3D8
Tashkhodzhaev, A. T., 1B55, 1B97, 4B98
Tataev, O. A., 2B49, 5B161
Tatarinskii, V. S., 4C4
Tate, W. P., 2D138
Tatone, O. S., 3C20
Tatsukawa, R., 1H40
Tautu, G., 3B138
Tawakkol, M. S., 3E20
Tawfik, A. S., 2E48
Tayim, H. A., 5B106
Taylor, K. A., 2J123
Taylor, J., 1H39
Taylor, J. F., 2D26
Taylor, M. C., 6A3*C*
Taylor, R., 1H41
Technicon Instruments Corp., 3D121*P*
Teder, J., 4C83
Teeny, F. M., 3F4
Tehan, F. J., 5J3
Teichner, S. J., 3J71
Telegin, N. L., 3E19

lling, G. M., 5F8
mber, G. A., 6C34
mpel, J. A., 1J99
mpleman, G. J., 2B29
naschuk, D., 4D55
nisheva, N. Kh., 6C49
ı Noever de Brauw, M. C., 2D89
odorescu, V., 3C62
odorovich, I. L., 2B16
phly, T. R., 3D63
plova, G. N., 5B19
ra, F., 6B133
rado, K., 4B111
rashima, S., 1B84
rlain, B., 3E35
rlouw, J. K., 1E9
rriere, L. C., 3D52
rry, K., 5G26
rtyshnik, E. G., 3J91
sarik, K., 2J31, 4C13, 4J7
shima, K., 1B27
ske, K., 1B21
smer, E., 5E25
ssari, D. J., 2C76
vosyan, A. S., 5C7, 6C3
wari, G. M., 3F14
wari, S. N., 1D21, 2D28
ıabet, S. K., 5B106
ıain, J. M., 4J54
ıale, M., 4A1*C*
ıan, E., 3B134, 4B152, 4B156
ıanh, N. P., 5B213
ıao, N. T. P., 5J31
ıeeuwen, A. B. E., 1D17
ıeodorsen, A., 6C47
ıeodorsen, L., 4A1*C*
ıeriault, G. E., 2J76
ıiagarajan, S., 3C10, 3H35
ıibert, R. J., 2A4*C*, 2D78
ıiegs, B. J., 3D56*P*
ıielemann, H., 1B22, 1E26, 1E52, 1H48, 2C36, 3B92, 4C74, 4G31
ıiem, R., 2C72
ıieme, K., 6B181
ıi Hong Mai, P., 4D11
ıi Phuong Thao, N., 5J31
ıirkettle, C., 2D126
ıoma, H., 5F25
ıoma, K., 5E40
ıomas, A. D., 5E7
ıomas, A. J., 2D99, 3J3*P*
ıomas, B. R., 2J43
ıomas, C. P., 2J72
ıomas, D., 5D14
ıomas, D. F., jun., 5A4*C*
homas, F. G., 6C19
homas, J. D. R., 3D118, 5J90, 5J92
homas, J. P., 2J156, 5A5*C*
homas, J.-P., 3E35
homas, L., 2A2*C*
homas, L. C., 2D144, 2J141, 5D86
homas, M. J. B., 2J76
homas, O., 3H5
homas, O. F., 3B167
homas, P. E., 3B118
homas, R. S., 1H6, 5A3*C*, 6A1*C*
homas, T. C., 3H29
homas, W. W., 4H3
homerson, D. R., 5J49
hompson, B., 5G37
hompson, D. E., 5B89
Thompson, J., 2B95
Thompson, J. A., 3D62
Thompson, J. F., 4G29
Thompson, J. S., 3G3
Thompson, K. C., 3B58, 5J49
Thompson, R. J., 2A7*C*
Thompson, R. D., 6E32
Thompson, R. M., 6D42
Thomson, J. A., 3D7
Thore, A., 1D87
Thoria, S. A. I., 3C5
Thorn, M. B., 5D73
Thornton, H. C., 3D124
Thorstenson, J. H., 3G45
Thorstensson, A., 6A2*C*
Thron, T., 3F37
Thruston, A. D., jun., 2A4*C*
Thuemmel, H. W., 3J53
Thuerauf, W., 5C5
Thuy Phuong, N., 1E28
Ticmanis, U., 5F17
Tiefenbach, B., 2A4*C*
Tiess, D., 6D33
Tietjen, G. L., 1A1*C*
Tikhonov, V. N., 5B88
Tildon, J. T., 1D92
Tilman, J., 6G1
Timar, P., 5A6*C*
Timberlake, C. F., 5F56
Timmins, P., 4E17
Timnick, A., 2A1*C*
Timofeev, G. A., 3B87
Timofeeva, V. I., 6C57
Timothy, J. G., 2J51
Tin, M., 2A1*C*
Tinderoth, K. U., 3J73*P*
Tingey, F. H., 2A7*C*
Tinsley, I. J., 3J30
Tioh, N. H., 1H11, 2C9
Tipton, L., 2J47
Tishbee, A., 6A1*C*
Tishchenko, M. A., 6B89
Titarenko, Yu. G., 2C27
Titus, C., 3A1*C*
Tjan, G. H., 4G37
Tobias, L., 2D69
Tobola, K., 5A6*C*
Tocco, D. J., 5D28
Tochenaya, N. P., 4D80
Toda, S., 1J46, 4D3
Todd, C. W., 1D80, 1D81
Todorova, Ya., 2C38
Todradze, G. Ya., 6H32
Toei, K., 4B139, 4B150, 6F9
Toelg, G., 4B83, 5B80
Toeregard, B., 3F43
Toffaletti, J., 6D11
Togstad, T., 4A1*C*
Tohyama, I., 1B5
Tokarz, A., 3G41
Tolgyessy, J., 2H2, 3A3
Tolk, A., 2B30
Tollan, K. A., 6C9
Tolstikov, V. P., 4B129
Toma, C., 2C49, 3C62
Tomasz, J., 2D136
Tomaszewska, E., 1E18
Tomaszewski, L., 5D51
Tomberlin, T. A., 6G2
Tomes, S. A., 3B88
Tomimori, T., 2E13
Tominaga, M., 5B174
Tomita, H., 3J31
Tomkiewicz, M., 2J107
Tomkin, G. H., 4A2*C*
Tomlinson, D. A., 2J67
Tomor, K., 5A6*C*
Tong, S. S. C., 2A1*C*
Tonkovic, M., 2C11
Tonn, G., 5A6*C*
Tonnet, N., 6C75
Tonogai, Y., 3F20
Tonosaki, K., 3B48
Toome, V., 3C22
Topalova, E., 5B53
Topp, J. A., 4J53
Toren, P. E., 2B48
Torma, L., 4G8
Toropova, L. S., 6B213
Toropova, V. F., 3B114, 6B110, 6B111
Torres, A. G. de, 5B206
Toshihiko, H., 1D41
Toth, K., 2H13, 2H39
Touchstone, J. C., 2G21
Tougaard, L., 4A1*C*
Toul, Z., 5J97
Tourte, J., 1G15
Tousset, J., 5A5*C*
Towner, R. D., 5D87
Townsend, M. G., 5J24
Townshend, A., 2A1*C*, 2B99, 2B101, 2B114, 5B158
Tracht, J. H., 4J25
Tran-Minh, C., 2J138
Tran Minh Duc, 6J44
Tranter, J., 3D43
Trapeznikov, L. V., 5B191
Trauberman, L., 3F6
Travesi Jimenez, A., 1H5, 2J158*B*, 5A5*C*
Travnickova, M., 1E32
Trebbi, A., 3D36
Treichel, I., 2J137
Treichel, P. M., 2J137
Tremillon, B., 4B16, 4C33
Tressl, R., 3F36
Trevelyan, W. E., 5D84
Trevillion, E. A., 5B31
Treytl, W. J., 2J71
Trieff, N. M., 4A9
Trifan, M., 2H44
Trikha, K. C., 1A6
Triolo, J. J., 5J37
Tripet, F. Y., 5E26
Trivedi, A. S., 1B126
Trofimov, N. V., 5B184
Trojanowska, M., 6D18
Trokhachenkova, O. P., 6C91
Trong Tai, P., 4F27
Troutman, S., 1J105
Truesdale, V. W., 6B118
Trujillo, P. E., 3H7
Trunova, N. I., 4B126
Truong, T. T., 5C27
Tsai, H.-T., 1H3, 6H30
Tsarfin, Ya. A., 3C74
Tsaritsyna, L. G., 2J17, 2J18
Tschida, J., 4D75
Tselik, E. I., 1B67
Tseng, P. K. C., 6C32
Tserkovnitskaya, I. A., 2B26
Tsevina, A. V., 2B105
Tsikora, I. L., 6B205
Tsitsishvili, G. V., 1J21, 2C12
Tsolov, T., 2B146, 4B28
Tsong, I. S. T., 4J44
Tsuboi, M., 2E13

Tsubouchi, M., 3E39
Tsuchiya, M., 6B197
Tsuda, S., 4H43
Tsuge, K., 1B27, 2E52
Tsuji, A., 1D65, 1D74, 6E25
Tsuji, H., 3D117
Tsuji, K., 4E22, 6A1*C*
Tsujii, K., 3B110
Tsukada, M., 4G19, 4G20
Tsukatani, H., 1D46
Tsunenari, S., 1D36
Tsurumi, C., 4B96
Tsvetkova, Z. N., 4B135
Tsvetkovskii, I. B., 6C94
Tucker, A. W., 1H10
Tudor, E., 3C30
Tuinstra, L. G. M. T., 3G17, 4F9
Tulloch, A. P., 3D71
Tumlinson, J. H., 3J11
Tuovinen, O. H., 3D112
Turel, R. J., 1D51
Turel, S. P., 5B105
Turel, Z. R., 3B141
Turk, K., 2F26
Turkstra, J., 3D21, 6B85
Turlabor Akt.-Ges., 1J102*P*
Turner, J. A., 2B110
Turner, T. D., 2E55, 3E15
Turowska, W., 5E44
Turpin, P.-Y., 1J96
Turulina, O. P., 4B80
Tur'yan, Ya. I., 4B131
Turzo, I., 3C55
Tusek, L., 6B22
Tuszynski, G. P., 2D121
Tuzimura, K., 2J121, 6D61
Tverdokhleb, P. E., 2J53
Tverdokhlebova, S. V., 6B205
Twente, R. T., 1D17
Twibell, J. D., 5A3*C*
Twitchett, P. J., 3E2
Tykva, R., 1J26, 5J105
Tyman, J. H. P., 4C91, 5J2
Tynan, E. E., 1J63
Tyrer, J. H., 3D34
Tyson, B. J., 4C46, 6H17
Tyurin, G. S., 5B119
Tyurin, N. G., 6B37
Tyutyunnikova, P. D., 4B44

Uang, S.-S., 6A8
Ubik, K., 3D68
Uchida, T., 6B38, 6B120
Uchiyama, M., 5G34
Uden, P. C., 3B23, 5B47, 6B18
Udenfriend, S., 2D116
Ueno, K., 1B51
Ufimtseva, R. N., 5B75
Uhlemann, E., 3B36
Uhlmann, H.-J., 2E5
Ui, N., 2D109
Ukhina, E. V., 6B233
Uldrikis, J., 4G12
Ulkina, Zh. I., 6B144
Ullemeyer, H., 4F36
Ulloa, H. G., 4A3*C*
Umar, Z., 1B74
Umbraziunaite, O., 5G7
Umezaki, Y., 4H39
Umezawa, H., 2B72
Umhauer, H., 5J120
Uncuta, C., 3E45
Unemoto, T., 2D86
Unger, E., 1B167, 1H25, 2B4
Unger, K., 2J12
Union Carbide Corp., 3J5*P*, 3J65*P*
United States Atomic Energy Commission, 2J151*P*
Unkauf, E., 5F25
Uno, T., 4D16
Unsoeld, E., 2J112
Unterhalt, B., 1J49, 5F41
Updike, S. J., 2J137
Upton, R. P., 3C64, 4E5
Urch, D. S., 2J61
Urmanov, N., 4B98
Usatenko, Yu. I., 1B148, 3B57, 5B167, 6C34
Ushakov, Yu. A., 3B9
Ushakova, N. M., 5B183
Usher, C. D., 5F8
Ushijima, N., 2D128
Usiekniewicz, K., 4E1
Usol'tseva, M. V., 6B46
Usova, E. P., 6C39
Usova, V. A., 6B116
Utkin, V. A., 6C40
Utracki, T., 6G11
Utsumi, Y., 2D106
Uvarova, K. A., 3B57

Vaarmann, A., 5B79
Vaccari, A., 5C12, 5C13
Vagina, I. M., 4D80
Vahouny, G. V., 2D67
Vaidya, V. G., 2B119
Vaidyanath, N., 2D17
Vajgand, V. J., 1C3, 5B95, 6B4
Vakhidov, Sh. A., 4B49
Vakhrusheva, G. I., 5H16
Vakorina, T. I., 4C17
Vakulenko, N. A., 2E18
Valade, J., 6C93
Valcarcel, M., 4B166, 5B206
Valencia, M. C., 6B196
Valencia Diaz, F., 5F33
Valkonen, T., 2J59
Val'kova, V. P., 5B84
Vall, G. A., 6B46
Vallee, B. L., 2D143
Vallo, F., 2H13
Vallon, J. J., 3D44
Valls, N., 1D47
Valuev, V. I., 6C94
van Bezeij, M., 3D79
van Bork, L. E., 5D30
van Bronswijk, W., 1F20
van Calker, J., 1J35
van Dalen, A., 5A5*C*
Vandeberg, J. T., 2C76
Vandecasteele, C., 3B90, 5B50
Vandeginste, B. G. M., 6J60
Vandenbalck, J. L., 1E49, 5E29, 6C30
van den Bergh, J. W. H., 5A5*C*
Vandenborn, H. W., 6A1*C*
van den Enden, J., 2F45
Van Den Heede, M. A., 5G14
VandenHeuvel, W. J. A., 3D47, 6A1*C*, 6D57
Van den Winkel, P., 6C33
Vandeputte, M., 6C33
van der Berg, G. W., 2B44
van der Bijl, P., 3J28, 6D66
Vanderborgh, N. E., 2A1*C*, 6J18
Vanderhaeghe, H., 6E13
van der Helm, H. J., 5E11
Vanderlinde, R. E., 5J56
van der Linden, W. E., 1B28, 2A17, 5B17
van der Meer, J. M., 1B28, 5B17
van der Plank, P., 5J32
van der Plas, H. C., 6F26
van der Pol, J. J. G., 2A6*C*
VanDerSlik, A. L., 3D77
van der Sloot, H. A., 5A5*C*
van der Slooten, E. P. J., 5E11
Vander Velde, G., 3G34
van der Vijver, L. M., 6C53
van der Walt, S. J., 2D127, 3D10
van der Walt, T. N., 6B134
van de Wiel, D. F. M., 5D91
Vandlik, T., 3C55
Van Dooren, P. H., 4G9
van Droogenbroeck, M. A., 6B85
Van Dyke, K., 1J82
Van Geet, A. L., 2B29
van Gend, H. W., 2F38
van Gent, C. M., 6D66
van Gheluwe, G., 1F17
van Gils, W. F., 3F13
Van Grieken, R. E., 1B6, 3B100, 5H2
Vanheertum, R., 3J41
van Hees, W., 5A4*C*
VanLehn, A. L., 2H3
van Lierop, J. B. H., 2F10
Vanluchene, E., 2A6*C*
van Mansvelt, F. J. W., 2D1
van Meyl, E., 6H31
Van Nam, N., 2B135
Vano, E., 6B95
van Ommen, J. G., 1C7
van Oort, W. J., 4B35, 4J4
Van Peteghem, C. H., 4G21, 5G1
van Putte, K., 2F45
van Raaphorst, J. G., 2B30
van Rompay, J. F. H., 5E39
van Rossum, G. J., 1B9
van Vliet, H., 1G2
Van-Vuuren, P., 3A1*C*
Van Zele, W. A., 5G14
Vaquerizo, L. N., 4A18
Varadarajulu, A., 5B35
Varadi, A., 3D97
Varga, S., 3A3
Varganov, V. P., 5C1
Varhelyi, C., 5E38
Varju, E. M., 5A6*C*
Varmuza, K., 3J76
Varricchio, F., 5D83
Varshney, K. G., 3B3
Vartak, D. G., 3B27
Vasendin, I. M., 5D54
Vasil'chenko, N. M., 6B50
Vasilenko, V. Ya., 4C45
Vasil'ev, V. V., 6B158
Vasil'eva, A. A., 4B159, 4B160
Vasil'eva, G. G., 6C77
Vasil'eva, L. N., 3B157, 5B48, 6B31
Vasileva-Aleksandrova, P. S., 3E34
Vasiliades, V. C., 2B59
Vasiliev, Ya. V., 5A6*C*
Vasilikiotis, G. S., 2B59
Vas'kovskii, V. E., 5D54
Vastagh, A., 3C84

udreuil, B., 5B76
vrecka, P., 3C45
ovenko, O. P., 6B70
cchia, P. T. D., 5G5
del, J., 6B34
ening, H., 1J7
gh, A., 2E56
gh, B., 3B130
illon, C., 2A1*C*
jrosta, J., 2C44
kslina, V. A., 3B114
lasco, J., 2F20, 2G14
lichko, V. N., 5A6*C*
ltman, A. M., 4E43
nger, L. A., 2C46
ngsarkar, B. R., 5B86
nkataraghavan, R., 3J15
nkateswarlu, P., 5D12
rbeek, F., 5B100
rbeke, R., 1F13
rdizade, A. A., 4B58, 6B87
rdizade, N., 5B91
rduin, P. A., 3D125
rebely, K., 3D49
reno, I., 4B6
ress, E., 2C60
rgnaud, J.-M., 4J20
rheggen, T. P. E. M., 6A2*C*
rhoef, N. J., 1D39
rhuelsdonk, C. A. H., 3G17
riovkin, G. V., 6B42
rkhovodov, P. A., 4B17
rma, B. C., 1C28, 2C47, 5C21
rma, K. K., 2C26, 5C18
rma, P. C., 1B42, 4B116
rmaas, L., 2F45
rmeer, E. A., 2A6*C*
rmont, J., 2J10
rnon, F., 2J16, 3J38, 5J14, 5J29
rpoorte, R., 2E9, 5E6
rster, N. F., 2J115
rwey, A. M. A., 1D17
rzar-Petri, G., 5E21
rzele, M., 2A6*C*, 3F16, 3F35
sel, J. E., 5J47
selovskii, P. F., 2B133
selsky, J. C., 2D12
shev, S. A., 4B109
slova, G. I., 3C2
spalec, R., 1J10
st, R. E., 3G28
stergaard, P., 3J14, 5A2*C*
trova, Z. P., 5J30
iala, A., 2D32, 4D29
icini, L., 6C80
ickers, T. J., 2A1*C*, 6J48
ictor, A. H., 1B2
idaurreta, L. E., 2C54
idaver, W., 1J41
iefhaus, H., 6B199
iel, C., 3E26
ie le Sage, R., 4B173
igdergauz, M. S., 6J21
iglino, P., 4D71
iitala, A. J., 4A1*C*
ijayashankar, Y. N., 5G30
ikhrov, S. V., 5B24
iktorova, E. N., 1C80
ilceanu, R., 3C16, 4C51
ilchez, J. L., 6B54
ilenchich, R., 1C74
illalobos, R., 5J25
illanueva, E. C., 6G8
illard, S. P., 2H34
Vinarov, I. V., 2B106
Vinarova, L. I., 4B74
Vinh Phuc, P., 6B119
Vinogradova, E. N., 5B48, 6B31
Virella, G., 2D129
Viricel, M., 6J14
Virin, L. I., 4C94
Visibelli, D., 2B27
Visscher, W., 2J140
Visser, G., 3F13
Viswanath, S. G., 4A13, 5B144
Vita, O. A., 2A7*C*
Vitali, A., 3D20
Vitan, G., 5J103
Vitek, R. K., 2A1*C*
Vitenberg, A. G., 4J23, 6A1*C*, 6H15
Vitkun, R. A., 1H30
Vittori, O., 5B21
Vittoria, A., 5E22
Vlacil, F., 1B7, 4B41, 4J9, 6B240*B*
Vlad, R., 3B59, 5B23
Vlasov, N. A., 1B72, 2B64, 5B93, 6B178
Vlasova, E. G., 5C26
Vnukovskaya, G. L., 4B12
Voellmin, J., 2A3*C*
Voelter, W., 2D96, 6A1*C*
Vogel, C.-H., 3B122
Vogel, J., 6F25
Vogel, R. S., 4J46
Vogh, J. W., 1C56
Vogt, C. H., 5A5*C*
Vogt, C. R. H., 6J17
Vogt, J. R., 5A5*C*
Vogt, K., 6D31
Voigt, R., 3E23
Voinov, V., 1C65
Vojkovic, V., 4B101
Vol'berg, N. Sh., 4H8, 4H11
Volchikhina, M. D., 1C73
Volkova, A. I., 3B97, 4B121, 6B190
Vollath, D., 5B110
Vollert, U., 4C32
Volonte, M. G., 1E38
Volpe, P., 6B19
von Baeckmann, A., 2A7*C*
von Campenhausen, H., 5D5
von Gutfeld, R. J., 1J63
Vora, D. N., 1B126
Vorobiova, G. A., 2B3
Vos, A., 3C91
Vossen, P. G. T., 4F1
Vossenberg, F. G. A., 2J147
Vostokov, V. M., 6A14
Votava, J., 3B47
Voznesenskii, V. A., 6B162
Vulli, M., 6J39
Vulterin, J., 2C39
Vyakhirev, D. A., 3B65, 5J30
Vyas, C. N., 3B24
Vyas, S. C., 3G25
Vycudilik, W., 4D28
Vydra, F., 1B34, 4B30, 5B11
Vylegzhanina, G. F., 4G34
Vyncke, W., 2F27
Vytras, K., 1B43, 3A7
Vytrasova, J., 1B43

Waalkes, T. P., 5A2*C*
Wackwitz, H., 2C77
Wada, H., 6D55
Wada, K., 5D76
Wade, C. W., 2J93
Wadke, M., 4D38
Wagemaker-Engels, I., 6D26
Wagenaar, H. C., 5B38
Wagenknecht, C., 2D150
Wagner, A., 2J65
Wagner, C. D., 2J74
Wagner, F. E., 5A6*C*
Wagner, Harald, 4J15
Wagner, Hildebert, 3E16
Wagner, J. G., 3D51
Wagner, P. E., 1J43
Wagner, W. F., 5H21
Wahbi, A. M., 1E15, 1J49, 2A12
Wahlroos, O., 2A3*C*
Wai, C. M., 4H19
Wakaizumi, N., 6F24
Wakakuwa, S. T., 1A1*C*
Wakamatsu, Y., 5B188
Wakimoto, T., 1H40
Walczyk, W., 4C79
Walden, M. K., 3J29
Waldl, E., 2J68
Waldman, B. A., 3B23
Walg, H. L., 2J41
Walisch, W., 1J59
Waliszewski, S., 6D37
Walker, C. R., 2A7*C*
Walker, E. A., 6F5
Walker, H. H., 3C43
Walker, J., 6E38
Walker, R. J., 2B154, 6B223
Walker, R. W., 3D47, 6D57
Walker, T. J., 3H14
Wall, L. L., sen., 3G2, 5G13
Wallace, G., 2A1*C*
Wallace, H. W., 1D14
Wallace, J. E., 2D36, 3D40, 6D17
Wallace, T. P., 5J119
Wallach, D. F. H., 6A2*C*
Walldorf, E., 4C60
Walle, K., 6D28
Walle, T., 3C33, 6D28, 6E23
Walsh, A., 4J58
Walter, H., jun., 1H4
Walter, R. L., 3J54
Walters, D. B., 2D62
Walters, F. H., 5B47, 6B18
Waltking, A. E., 4F34
Wamberg, S., 4A1*C*
Wan, P. J., 2A5*C*
Wancheck, P. L., 2A1*C*
Wanek, W., 3B104
Wang, L. K., 2H43, 3H42, 4H47
Wang, M. H., 2H43
Wang, R. I. H., 3D28
Wappner, R. S., 6D42
Ward, A. F., 1B15, 2A1*C*, 3J60
Ward, A. S., 6J78
Ward, D. J., 2J20
Ward, R. T., 5F61
Ward, T. V., 1J31
Ware, A. R., 6B44
Ware, D., 5J68
Ware, G. M., 2F18
Warlimont, H., 2J68
Warne, S. St. J., 4B170
Warner, C. V., 2D67
Warner, I. M., 4J50
Warner, T. B., 2H37
Warren, H. D., 4B5
Warren, J., 4B68
Warren, L., 2D121

Warren, R. J., 1E47, 2C48, 4E23
Warthen, J. D., jun., 1C26
Warzee, P., 6H55*B*
Wasa, T., 6J10
Washburn, J., 5J83
Wasiak-Wisniewska, D., 6G10
Wasilewska, M., 6B238
Wassen, A. M., 4A1*C*
Wasserburg, G. J., 6B133
Wassink, J. G., 2A6*C*
Watanabe, C., 3J31
Watanabe, Kazuo, 6B219
Watanabe, Kunihiro, 1B57, 1B179
Watanabe, N., 2J118
Water Research Centre, 5H40
Waterbury, G. R., 2A7*C*, 2J2
Wathelet, J.-P., 3F41
Watkins, N. H., 2B84
Watkiss, P., 3C25
Watne, B., 2A1*C*
Watson, A., 2C28, 3C27
Watson, E., 2D39
Watson, G. R., 1D50
Watson, I. D., 3D39
Watson, J. T., 2A7*C*
Watterson, J. I. W., 2J154
Watterson, J. R., 1B113
Wauchope, R. D., 5J7
Waugh, J. S., 2J104
Weatherby, T. J., 1F15
Weaver, J. N., 3B171
Webb, J. P. W., 4D58
Webber, T. J., 6B216
Weber, J. M., 6E2
Weber, K., 5B115
Weber, S., 5F63
Weber, U., 6F13
Weber, W. W., 2D43
Wechter, S., 3A1*C*
Weeke, F., 6A1*C*
Weichert, N., 5A3*C*
Weidenbach, A., 1D84
Weidenhoffer, Z., 4C8
Weigel, H., 5C28
Weigert, P., 5F25, 6F1
Weil, D., 1H34
Weil-Malherbe, H., 5D63
Weimer, W. C., 5H28
Weinert, C. H. S. W., 6B53
Weinke, H. H., 1A13
Weinlaender, W., 3J18
Weinstock, E. V., 6A3*C*
Weiser, C., 2J91
Weiss, B. H., 1A1*C*
Weiss, H., 4G38
Weiss, P. A. M., 5D57, 6D49
Weisser, O., 3C45
Weisweiler, W., 1B81, 3B89
Weisz, H., 1B16, 4B6, 5F62
Weisz, J., 4F13, 6C20
Weitz, W. E., jun., 4D8
Welch, D. L., 5J52
Weliky, N., 3D101
Wellhaeuser, R., 1F10
Wells, C. E., 4E13
Wells, J. M., 6B57, 6B237
Wember, M., 6D59
Wendel, C. T., 3J25
Wendlandt, G. M., 2A2*C*
Wendlandt, W. W., 5A6*C*
Wentworth, W. E., 6A1*C*
Wenzel, K., 2G3
Wenzel, S., 2B95
Werner, U., 2D88
Werner, W., 4B83
Wernicke, H., 2D15
Wessman, R. A., 1A1*C*, 2A7*C*
West, A. D., 2J48
West, J. C., 3F49
West, P. W., 2H8
West, S. D., 4C28
West, T. S., 2J88
Westberg, H. H., 3H2
Westerman, C. E., 2A1*C*
Westgard, J. O., 5A8
Westin-Sjoedahl, G., 2D111
Weston, J. C., 3H36
Wetlaufer, D. B., 2D115
Weyh, H., 5F52
Wezranowski, E., 4B107
Whang, Kyu Ja, 1B51
Whatley, F. R., 4D74
Wheeler, R. C., 2A4*C*
Wheeler, W. B., 5G33
Whelan, J. K., 4D56
Whenham, R. J., 5F36
Wherley, S. K., 4G6
Whipple, E. R., 4B71
Whitaker, T. B., 2G14
Whitby, L. G., 4D76
White, C. K., 2C4
White, E. L., 4C88
White, E. R., 2E16
White, E. W., 1J105
White, F. C., 3G28
White, V. R., 1E3, 5D64
White, W., 2J119
White, W. R., 3H47
White, W. W., 6A7
Whitehead, E. V., 3C40
Whitehead, H. R., 4B158
Whitehead, P. H., 5D97
Whitham, R., 3B148
Whitten, M. E., 2G14
Widmaier, W., 5E18
Wiederhold, P. R., 3A1*C*
Wiegand, K., 1J37
Wielders, J. P. M., 6J12
Wielopolski, L., 5A5*C*
Wiesner, I., 6C28
Wiesnerova, L., 6C28
Wiggins, P. F., 5A5*C*, 5B43
Wiggins, R. C., 4D62
Wijedasa, M. A., 4G3
Wijsbeek, J., 5D30
Wikjord, A. G., 2A4*C*
Wilcox, F. H., 1D76
Wilczynska, I., 4E46
Wildanger, W., 5F2
Wilder, B. T., 6J52
Wilk, S., 2D39
Wilke, G., 3B36
Wilkeyson, J. K., 6B183
Wilkins, C. L., 5C10, 6A20
Wilkinson, D. R., 2E53
Wilkinson, J. E., 4G24
Wilkinson, P. K., 3D51
Wilkniss, P. E., 6H3
Wilks, P. A., jun., 2A1*C*
Willekens, G. J., 4E4, 5E23
Williams, A. E., 1H18
Williams, A. K., 6E16
Williams, D. A., 3B37, 6B176
Williams, D. R., 5A5*C*, 6B216
Williams, F. W., 2J80, 4H2
Williams, J. F., 3D54
Williams, J. P., 1D50
Williams, N., 3C70
Williams, N. J., 2A7*C*
Williams, O. M., 5J8
Williams, P. C., 3G5
Williams, R. C., 2A1*C*
Williams, R. E., 2J122
Williams, R. W., 3J55*P*
Williamson, B. F., 2E39
Willis, D. D., 1J5
Willis, J. B., 5B217
Willis, R. D., 3J54
Willumsen, L., 4A1*C*
Wilson, A. G., 2G10
Wilson, B., 1J27
Wilson, B. P., 4G32
Wilson, C. H., 4C64
Wilson, C. L., 6A22*B*
Wilson, D. F., 5H42
Wilson, D. W., 6A22*B*
Wilson, G., 2A3*C*
Wilson, J. K., 2A1*C*
Wilson, J. R., 5H42
Wilson, Joe T., 2G22
Wilson, John T., 2D50
Wilson, S. E., 6C97
Wilson, T. W., 4D30
Wimberley, J. W., 1G5, 4H5
Wims, A. M., 2A1*C*, 5C59, 6C61
Winchester, J. W., 1B6, 3B100, 5D3
Winefordner, J. D., 2A1*C*, 3B49, 4J49, 4J59, 4J57, 5B5, 6J52
Wininger, M. T., 6A1*C*
Winkler, H. A., 1H42
Winnett, G., 6H23
Winnicka, U., 4D44
Winograd, N., 2A1*C*
Winter, J. A., 2A4*C*
Winterlin, W. L., 6G9
Winters, W. I., 5B112, 5J41
Wippler, J. F., 4G4
Wist, A., 5A6*C*
Witt, J. J., 1D95
Wittam, E. M., 2J125
Witteck, J., 4H44
Wittick, J. J., 5J12
Witting, U., 3D46
Wittmer, D. P., 3C68
Wobrauschek, P., 1B119
Wodkiewicz, J., 5E10
Woelfle, R., 2J155
Wogman, N. A., 6H25
Wohlers, C. C., 2A1*C*
Woidich, H., 3F5
Wojsa, K., 6E42
Wojtasiewicz-Obrzut, D., 4B89
Wojtynska, E., 4C85
Wolcott, D. K., 2C54, 3H8, 4D4, 4H10
Wold, S., 5A8, 6J25
Wolen, R. L., 6J29
Wolf, F., 4B106
Wolf, F. J., 3D47
Wolfe, L. S., 2D73
Wolfe, N. L., 5H35
Wolfensberger, M., 6A1*C*
Wolfermann, H., 2J68
Wolff, H., 2D124
Wolfram, L. E., 2A1*C*
Wolkoff, A. W., 2A4*C*, 2H35
Woller, R., 2C14
Wollmann, H., 1D42
Woltermann, H. A., 2B24, 3B88
Wondzinski, W., 2J84
Wong, C. M., 2B65

Yong, C. S., 2A4*C*
Yong, D. T. L., 2A4*C*
Yong, E., 2F47
Yong, N. P., 6F20
Yong, P. T. S., 6H18
Yong, Y.-I, 5F51
Yood, G. A., 1J87
Yood, N. F., 1D28
Yood, P., 5J104
Yood, P. J., 4F13, 6C20
Yood, R. A., 1A1*C*
Yood, R. J., 5A7*C*
Yood, W. G., 6D56
Yoodriff, R., 2A1*C*
Yoodruff, D. P., 2J73
Yoodruff, H. B., 2J103, 6J61
Yoodward, C., 1J67*B*
Yoodward, J. D., 3F31
Yoolley, J. L., jun., 1D27
Yootton, M., 4F14
Yortberg, B., 2D79
Yosiak, B., 4E30
Yozniak, J., 3G41
Yragg, J. S., 4A11
Yright, A. N., 6H45
Yright, F. C., 3F22, 6D9
Yright, S. T. C., 2D139
Yrobel, B., 4C72
Yronski, M., 2C13
Yu, C., 2A4*C*, 5A4*C*
Yu, C. H., 2B28
Yu, C.-Y., 5J12
Yu, J. F., 5A10
Yu, S.-S., 1H3, 6H30
Yu, T.-K. P., 2A1*C*
Yurm, H., 4C68
Yurster, D. E., 3D41
Yyatt, D. M., 3B94
Yyatt, R. J., 4D52
Yyrzykowska-Stankiewicz, D., 5A6*C*
Yyttenbach, A., 5B1

Zuan Phan, L., 3E35

Zaeger, F. J., 2A1*C*
Zagita, Y., 3C67
Zakimova, V. A., 5B13
Zakobson, L. M., 3E22
Zakovenko, E. I., 5J45
Zakovlev, P. P., 4C3, 5C4
Zakovlev, P. Ya., 2B85, 2B120
Zakovleva, T. P., 2B17
Zakovleva, V. G., 3B124, 6B168
Zakowitz, H., 1J66*B*
Zakubenok, V. V., 1C40
Zakushev, V. S., 5A6*C*
Zalabik, H. S., 1J99
Zalcindag, O. N., 6E31
Zamabe, T., 1B17
Zamada, E. W., 4D10
Zamada, K., 5A6*C*
Zamada, N., 3B31
Zamaguchi, N., 1B147
Zamaji, A., 2G30
Zamamoto, D., 4G19, 4G20
Zamamoto, S., 6D54
Zamamoto, T., 2D23, 2G6
Zamamoto, Youji, 4D3
Zamamoto, Yuroku, 2H21
Zamamura, M., 4C76
Zamamura, S. S., 2A7*C*
Yamamura, Y., 3B17
Yamanaka, K., 6F10
Yamane, T., 3B31
Yamane, Y., 4H12
Yamanis, J., 1C74
Yamanouchi, K., 2D49
Yamazoe, S., 4C54
Yambushev, F. D., 6C49
Yampol'skii, P. Ya., 4B167
Yanagisawa, Y., 2D29
Yang, C. Y., 1J48
Yang, J. Y., 2H43
Yang, R. S. H., 5D34
Yang, S. K., 2J15
Yankov, L. K., 5E20
Yankovskaya, E. V., 4C31, 5D70
Yankovskii, A. A., 6B25
Yanovskii, S. M., 3J43
Yanushkovskaya, Ya. G., 4B123
Yap, S. K., 2E34
Yap, W. T., 5A7*C*
Yarita, T., 1H36
Yarkova, L. V., 5B88
Yarnykh, A. G., 2C27
Yarosevich, I. V., 5B127
Yarovenko, A. N., 6B146
Yashiki, M., 2B35
Yashin, Ya. I., 5D81, 5J30
Yassa, D. A., 1E23, 1E37
Yasuda, S., 1B24
Yasuda, Kazuo, 3J64
Yasuda, Kosaku, 3F47
Yasumoto, K., 3D117
Yates, D., 2J92
Yates, D. A., 5J39
Yatirajam, V., 4B122, 5B151
Yatsimirskii, K. B., 2B38
Yau, W. W., 5J11
Yeh, S.-J., 1D8
Yeh, S. Y., 2D27
Yen, T. F., 2C86*B*
Yeung, E. S., 6H6
Yeves, A., 1H5
Yinon, J., 5J74
Yip, G., 3G22
Yoda, B., 1D94
Yogo, T., 6B112
Yokohata, A., 4H43
Yokoyama, K., 2D49
Yoneyama, T., 2D105
Yong Keun Lee, 1B51
Yoshida, Hideyo, 3B85
Yoshida, Hiroshi, 3H43
Yoshida, Tetsuo, 5J122
Yoshida, Tsuguchika, 2E33, 3E40
Yoshimori, T., 4B62, 5A11
Yoshimoto, K., 3C26
Yoshimura, E., 6J58
Yoshimura, M., 2F9
Yoshimura, W., 6B129
Yoshioka, H., 4B93
Yoshioka, M., 6D44
Yoshiue, S., 6D44
Yoshizaki, M., 2E13
Young, J. D., 5D96
Young, J. W., 2D57
Young, N. D., 2A1*C*
Young, P. A., 3D107
Young, P. N. W., 4H24
Young, R. A., 6H27
Youngblood, D. H., 2B163*B*
Younker, D. R., 6J17
Youssef, H. Z., 5C34
Yoza, N., 4B90
Yudelevich, I. G., 4B159, 4B160, 5B211, 6B46, 6B116, 6B131, 6B167
Yudina, L. P., 2B158
Yuen, W. K., 2J82
Yukhin, Yu. M., 1B35, 2B103, 3B45, 6B67
Yuki, H., 2D59, 2D140, 4C16
Yunusov, Z. T., 5C41
Yupko, L. M., 5A6*C*
Yurchenko, L. D., 2B61
Yurow, H. W., 2C23
Yurzhenko, A. I., 6C43
Yusfin, V. S., 1C60, 5C44
Yushina, G. A., 1C31
Yusova, V. A., 3B52
Yustus, Z. L., 3B157, 5B48, 6B31

Zachmann, M., 2A3*C*
Zadvornyi, A. S., 2B89
Zagalak, M. J., 2A3*C*
Zagar, J. B., 2G18
Zagata, R., 4B86
Zaharia, C. N., 6J49
Zahn, H., 2C73
Zaidi, S., 6F29
Zairova, G. M., 6B13
Zak, A. F., 3E22
Zak, B., 2D78
Zakharchuk, N. F., 6B167
Zakhariya, N. F., 4B80, 6B155
Zakharov, E. A., 6B108
Zakharov, M. S., 2B13, 6B152
Zakharov, V. A., 5B177, 6B226
Zakharova, N. A., 4B65
Zaki, M. T. M., 1E24, 5C30
Zakrevsky, J.-G., 3F23
Zakrzewski, Z., 2E7, 6E6, 6E33
Zaleiko, N. S., 3A1*C*
Zalevskaya, T. L., 2B1
Zalozhkova, K. I., 4H32
Zambelli, J., 6C92
Zambotti, F., 6D43
Zamek, M., 1B77
Zamfir, I., 3E45
Zander, G. S., 3A11
Zanello, G., 5B133
Zanker, A., 1B110
Zanotti, L., 6B126
Zapata, B. D., 4A3*C*
Zapior, B., 4C59
Zappavigna, R., 1F4
Zare, R. N., 2D75
Zarembo, J. E., 1E47, 2C48 2E16, 4E23
Zarinskii, V. A., 2B130
Zarriello, P. R., 5J70
Zato del Corral, J., 1B125
Zatulina, O. S., 6B192
Zav'yalova, N. D., 6B61
Zdorova, E. P., 5B57
Zech, K., 2D96, 6A1*C*
Zegarski, K., 6C17
Zeinalova, E. A., 5H32
Zeisler, R., 5A5*C*
Zeitler, G., 1B167, 1H25, 2B4
Zelenay, K., 6E41
Zelikina, G. Ya., 5J57
Zelov, V. V., 5C36, 5C37
Zelyukova, Yu. V., 1H30
Zemtsova, A. G., 6B51
Zenker, W., 2C61
Zerba, E. N., 1C29

Zezyanova, A. G., 2B105
Zhantalei, B. P., 6C18
Zhavoronkov, N. M., 5B210
Zhavoronkov, V. Ya., 6B42
Zhdamarov, O. S., 3C34, 5C15
Zhdamarova, V. N., 5C15
Zhdanov, A. K., 1B66, 6B82
Zhebentvaev, A. I., 4B121
Zhigalovskaya, T. N., 2H20
Zhilina, T. I., 2B26
Zhinkin, D. Ya., 6C91
Zhirnova, N. M., 5B90
Zhivopistsev, V. P., 1B11, 1B70, 1B136, 4A12
Zhomov, A. K., 1C53
Zhukovskaya, S. A., 3E19
Zhupieva, E. P., 1B123
Zhuravlev, E. G., 5H14
Zhuravleva, M. A., 4J26
Ziegler, A., 5F57
Ziegler, D., 2D130
Ziegler, E., 3F18
Ziegler, H. W., 1E44, 4E11
Ziegler, J. F., 6J41
Zielinski, W. L., jun., 6J57
Zietek, M., 5D35
Zietkiewicz, M., 4C93
Zikolov, P., 1C23
Zil'bershtein, Kh. I., 2B63
Zimmer, H., 6C84
Zimmerhackl, E., 1B167, 1H25, 2B4
Zimmerli, B., 2F41
Zimmermann, G., 3C76
Zinchuk, V. K., 5B30, 6B132
Zinic, M., 2E37
Zinn, L., 3A14*B*
Zitter, R. N., 2J46
Zivanov-Stakic, D., 5E31
Zlatkis, A., 5A2*C*, 6A1*C*, 6J31*B*
Zlokazov, V. B., 4A19
Znamenskaya, A. P., 6C39
Zobin, A., 1E7
Zoccolillo, L., 1H13
Zoller, W. H., 3B170, 3H16
Zolner, W. J., 3A1*C*
Zolotareva, O. V., 5C42
Zolotavin, V. L., 5B181
Zolotov, Yu. A., 2B3, 4B13, 4B102, 5B153, 5B190
Zolotova, S. V., 5B184
Zolotovitskaya, E. S., 5B28, 5J4
Zonneveld, H., 3F19
Zorina, G. P., 5B157
Zoro, J. A., 3J77
Zowall, H., 6C89
Zozulya, A. P., 4C3, 5C4
Zsinka, L., 5A6*C*
Zuanon Netto, J., 2B23, 2B136
Zubtsova, T. L., 3B57
Zuercher, K., 2F33, 5F16, 6F21
Zueva, M. V., 3B65
Zuitseva, L. I., 5H16
Zul'figarov, O. S., 5B126
Zuskovich, I. Sh., 4G12
Zuspan, F. P., 2D70, 3D69, 6D4
Zvezdina, V. P., 3C6
Zwaving, J. H., 4E20
Zwicker, J. D., 5A7*C*
Zwirello, H., 3B108
Zyka, J., 1E28, 2C32
Zynger, J., 1J36, 2J160, 6C48